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REHABILITATION LITERATURE

National Society for
Crippled Children and Adults

Review Articles

Book Reviews

Digests

Abstracts

Events and Comments

Rehabilitation Literature is intended for use by professional personnel and students in all disciplines concerned with rehabilitation of the handicapped. It is dedicated to the advancement of knowledge and skills and to the encouragement of cooperative efforts by professional members of the rehabilitation team. Goals are to promote communication among workers and to alert each to the literature on development and progress both in his own area of responsibility and in related areas.

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REHABILITATION LITERATURE

Article of the Month



About the Author . . .

Dr. Robinault has been director of professional education at the Institute for the Crippled and Disabled in New York since 1958. After graduating from Barnard College, New York, N.Y., in 1937, she studied for two years at New York University Medical College. She received an M.A. degree in occupational therapy in 1950 from NYU's School of Education and in 1958 a Ph.D. degree in developmental psychology from Columbia University. Director of occupational therapy at the Lenox Hill Preschool Cerebral Palsy Center from 1950 to 1954, she joined the staff at the College of Physicians and Surgeons, Columbia University, in 1954, where she was instructor in the occupational therapy department (1954-1959) and associate supervisor (1954-1957) and supervisor (1957-1959) of postgraduate cerebral palsy courses. Dr. Robinault has also lectured and written articles on various phases of cerebral palsy and on occupational therapy. She has collaborated with Eric Denhoff in writing a book Cerebral Palsy and Related Handicaps, soon to be published.

This original article was written especially for Rehabilitation Literature.

Professional Education: A Rehabilitation Center Responsibility

Isabel P. Robinault, Ph.D.

REHABILITATION SERVICES must keep pace with the demands of a population that is increasing,¹ growing older, and experiencing greater numbers of accidents caused by technological hazards.² Recognizing this, the federal government is committed to expanding services, research, and training.³ Rehabilitation centers with their vast resources for practical training have much to contribute to this effort. At the Institute for the Crippled and Disabled, a vocationally oriented rehabilitation center, professional education is an integral part of a three-fold responsibility: service to the client, research for improved methods, and teaching to meet the qualitative and quantitative personnel needs. In the words of the director, Willis C. Gorthy, "As long as the human body and mind are buffeted and attacked by accident and disease, rehabilitation must continue to search for ways to ameliorate residual disability and to extend the knowledge gained so that all who labor in the field may be better equipped to serve the handicapped."⁴

Scope of Professional Education

A question most pertinent to educators is: Should rehabilitation be taught as an isolated subject, or are there any general principles of rehabilitation that may permeate the information of all disciplines? In recent years this question was reported on by at least three institutes^{5,6,7} of professional personnel who are working and teaching in fields related to rehabilitation throughout the nation. The consensus was that rehabilitation is not the sole province of any one profession or of an isolated splinter group. The tenets of rehabilitation are principles and assumptions underlying all areas of restorative service.

The following is a digest of rehabilitation principles enumerated at the Princeton Institute:⁷

1. *Value of the Human Being:* The disabled has a right to be assisted in unfolding potentialities for his own sake as well as that of society.
2. *Membership in Society:* The disabled has a right to partake and be accepted in activities of society.
3. *Assets of the Person:* Emphasis should be on healthy components of man while ameliorating the pathological.
4. *Reality Factors:* Help in coping with physical, cultural, and employment environment must be offered.
5. *Comprehensive Treatment:* Attention should be given to physical, emotional, social, and economic problems of the individual.
6. *Variability of Treatment:* Treatment must be geared to needs rather than categorical diagnostic labels.
7. *Participation of the Patient:* The patient deserves acceptance and should increasingly assume an active role in planning and executing his program.
8. *Responsibility of Society:* Federal and private efforts share responsibility of providing facilities (schools, hospitals, work opportunities) to meet needs of all members of society.
9. *Interdisciplinary and Interagency Integration:* Co-ordinated efforts of many professions, agencies, and community resources must cover the multiplicity of problems.
10. *Time Dimension:* Help should continue until individual needs are resolved and interfering social conditions corrected.
11. *Ubiquity of Psychological Factors:* Reaction of the individual to all aspects of treatment must be recognized.
12. *Evaluation:* Constant re-examination of the individual and his program must take place in light of new knowledge and understanding.

These principles of rehabilitation content call for a collaboration of interprofessional functioning and interdisciplinary training. The combined teaching efforts of a university and a rehabilitation center are needed to satisfy these comprehensive didactic requirements. For example, the university provides the professional worker with the specialized knowledge and skill of his own field; the rehabilitation center teaches the professional worker to communicate and integrate his skill with that of other professionals toward client-centered goals.⁵ Teamwork is a skill that must be experienced, rather than taught as a didactic subject, and it is here that a rehabilitation center makes a unique training contribution. The multidisciplinary instruction of the university is translated by the rehabilitation center into an interdisciplinary approach. Another advantage of co-operation is that the university's unlimited horizon can lift the sights of the rehabilitation center's staff, while the center's program-centered clinical

training provides a laboratory wherein the university⁶ may test the practical application of its theories.

Furthermore, by granting study opportunities to teaching members of the rehabilitation center's staff, the university contributes to the "continued education of the educated"⁸ and assures itself of high caliber personnel in the search for knowledge, be it theoretical or practical. On the other hand the rehabilitation center is a link between the professional accreditation boards in society⁶ and the university's idealistic pursuit of knowledge. As such the rehabilitation center may interpret these pressures to the university and collaborate in meeting some of these requirements, thereby lessening the burden of the university. It is in light of these mutual benefits that the Institute for the Crippled and Disabled values its affiliation with New York University and its collaboration in specific field training with other institutions of higher learning.

Varieties of Educational Experience in a Rehabilitation Center

The current teaching program at the Institute for the Crippled and Disabled is co-ordinated by a director of professional education and offers a variety of educational experiences (see Chart I). The Institute staff collaborates with New York University, with which it is professionally affiliated, in postgraduate, graduate, and undergraduate training. In collaboration with Columbia University, the Institute provides clinical experience and training for rehabilitation trainees in physical therapy, occupational therapy, rehabilitation nursing, and rehabilitation counseling. Other universities are invited to suggest doctoral candidates for internships in rehabilitation counseling, as well as in clinical and counseling psychology. This preservice training not only heightens the student's awareness of applications to basic theories but provides on-the-job training that may later count as work experience in his elected professional field. In addition to these programs at the Institute to which university students come, members of the Institute staff participate in teaching activities at metropolitan universities, to the degree of their competency and consistent with their ability to carry on their duties at the Institute. This type of teaching contact keeps the instructor alert to new developments in his field and helps to permeate the university with the philosophy of the rehabilitation process without necessarily making any basic change in concept of courses. Garrett⁶ has pointed out additional practical values of this: "Earlier introduction of rehabilitation content into all of the basic fundamental university curricula will interest many individuals in rehabilitation careers. Such orientation will also provide needed information to many people regarding rehabilitation services . . ."

Specialized training courses and workshops are given by the Institute independently (see Chart I). Several of these are devoted to specific technics sought by personnel

CHART I

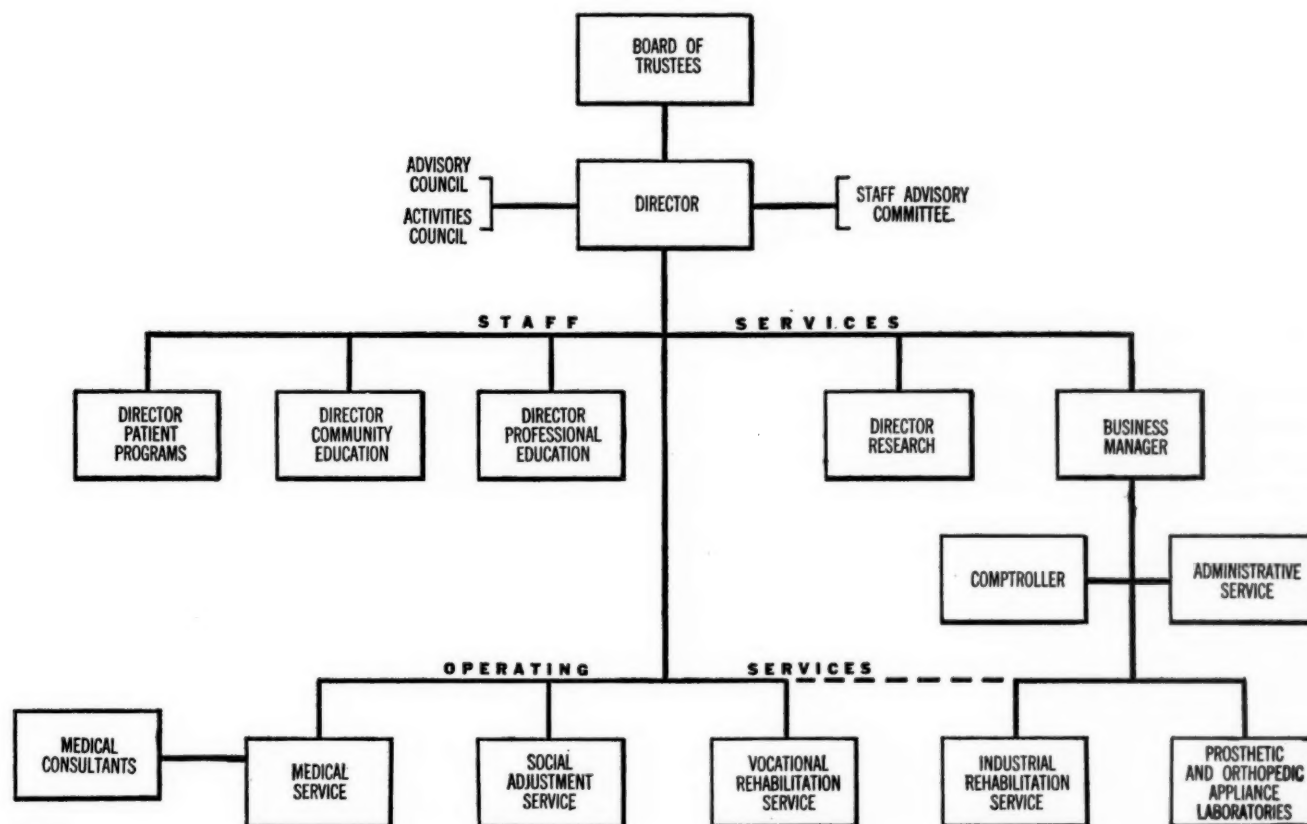
Teaching and Training Program at the Institute for the Crippled and Disabled

- I. University Affiliations at ICD
 - A. Postgraduate
 - Residencies for Physicians in Physical Medicine and Rehabilitation (NYU)
 - Foreign-Exchange Students in Physical and Occupational Therapy
 - B. Graduate
 1. Internships for Doctorate Candidates (*open*)*
 - a. Clinical and Counseling Psychology
 - b. Vocational Counseling
 2. Advanced Clinical Practice and Fieldwork
 - a. Vocational Counseling for M.A. Candidates (NYU)
 - b. Social Work—Casework and Group Work (NYU: *open*)
 - c. Clinical Affiliations in Physical Therapy (*open*)
 - d. Clinical Affiliations in Occupational Therapy (*open*)
 - e. Fieldwork in Rehabilitation Nursing (T.C.)
 3. Courses for Academic Credit
 - a. Vocational Evaluation for Counselors (NYU)
 - b. June Workshop for Rehabilitation Personnel (T.C.)
 - C. Undergraduate
 1. Prevocational Exploration for Occupational Therapists (NYU)
 2. Occupational Therapy Clerkship (Columbia)
 - II. Teaching Activities of ICD Staff at Metropolitan Universities
 - A. Collaborate in Occupational Therapy for
 - Physical Disabilities (Columbia)
 - B. Collaborate in Occupational Analysis (Columbia)
 - C. Collaborate in Sheltered Workshop Management (NYU)
 - D. Postgraduate Cerebral Palsy Courses (Columbia)
 - E. Developing Placement Leads for the Physically Handicapped (NYU)
 - F. Group Therapy (NYU)
 - G. Principles of Casework for Teachers and Counselors (Yeshiva)
 - H. Psychiatry: Supervision of Psychotherapy of Medical Students and Residents (NYU)
 - I. Collaborate in Prosthetic Courses (NYU)
 - III. Institute Courses
 - A. TOWER Vocational Evaluation for Prevocational Evaluators
 - B. Prosthetic and Orthotic Training
 - IV. Institute Workshops 1959-1960
 - "Prevocational Programs" for Directors of OT Clinical Training
 - "Concepts and Techniques of Total Evaluation" for Directors of Rehabilitation Centers
 - "1960 Compensation Insurance Conference" for Insurance Carriers
 - "Meeting Client Needs" for Personnel in Rehabilitation Fields
 - Annual Conference of Co-ordinators of Rehabilitation Counselor Training
 - V. Field Visits
 - Tours by Community Education Service
 - Orientation and Conference for Administrators and Directors of Training Programs
 - VI. Professional Publications
- Yeshiva=Yeshiva University.
 *(*open*)=qualified candidates accepted from any university.

in rehabilitation, irrespective of their academic background. The prosthetics and orthotics training and the prevocational evaluation courses that teach the TOWER system⁹ fit into this category. Classes are purposely kept small enough to be able to cover the information on an individual basis, considering both the capacity of the student and the scope of the job to which he will return. Workshops such as the June Workshop—a three-week course in goals and technics of comprehensive rehabilitation—are open to personnel in any discipline in the field of rehabilitation in order to strengthen individual programs by making it possible for those who are to work together to be trained together. Workshops, such as those

in concepts and technics of total evaluation for directors of rehabilitation centers, take into consideration the fact that rehabilitation services are growing. This growth creates a need for persons who can fill different types of positions. At present there is no university training for administrators of rehabilitation centers. As a result, many administrators develop on the job, having come out of positions related to rehabilitation, but with limited knowledge of management principles. At the last workshop for directors, there were persons whose backgrounds were in medicine, nursing, therapy, vocational rehabilitation, and psychology. The Institute's workshop stepped into this training gap by giving these on-the-job experienced

CHART II

INSTITUTE FOR THE CRIPPLED AND DISABLED
ORGANIZATION CHART

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directors an opportunity to exchange ideas on methods and expose problems to group consideration, while less experienced directors had the opportunity of profiting from the discussion and from materials distributed that outlined center operations.

Although certain training programs meet a standard need, the Institute reviews training schedules yearly. Programs are revised to keep them up to date, and new programs are instigated as a result of requests from the outside, as well as from staff suggestions or interests. Therefore, the characteristics of a teaching center where the staff is involved in planning, instruction, and research may not be the same as the characteristics of other centers. Opportunities for research introduce new personnel, and physical facilities for the resulting type of client-care are added to the regular operational needs. In addition, time used for teaching and research cannot be subtracted from time allotted to client services. Therefore, administratively, a teaching rehabilitation center has the choice of (a) cutting down on the number of clients serviced or (b) adding service staff, distributing the teaching load, and

limiting training programs to those that cover basic necessities and special needs of the field. The Institute has chosen this second course, and policy for present instruction as well as for future growth is intimately associated with center operations. To give a specific example: in planning for the construction of an additional building at the Institute for the Crippled and Disabled, the director of professional education is responsible for projecting teaching needs and goals into personnel and space requirements for the new building and co-ordinating these with personnel and space revisions in the old. These plans, as well as reports of current programs of instruction, are brought to the biweekly conferences of the Special Staff Committee, which is chaired by the director of the Institute and attended by the business manager plus the directors of patient programs, publicity and community education, and professional education (*see Chart II*).

Responsibilities of a Training Co-ordinator

Although the director of professional education and training may participate in instruction—within areas of

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competency—the main responsibility of this position is to effect collective collaboration of teaching personnel within the center, with the affiliating university and with educators in the community.

Within the rehabilitation center, collective collaboration presents two major areas: (a) co-ordination of training programs and (b) analysis of programming. The responsibility for co-ordinating all training programs in medical, vocational, and social adjustment services has several aspects. First of all, it must prove itself a *service* for these specialists, rather than one more hurdle to be jumped in the execution of their major intentions. One possible service is care in scheduling that allows for interdepartmental suggestions and that places the teaching load at intervals that do not conflict with client commitments. Another service that the co-ordinator may render the teaching specialist is consolidation of orientation so that students needing similar information may be taught at one time. In addition, the co-ordinator may orient visiting professional personnel to the organization of the Institute and to interdepartmental considerations, leaving the specialist more time to devote to interpreting his particular interests. Other services include relieving the specialist of the administrative burdens of teaching by handling the mechanics of student registration, scholarship aid, interdepartmental scheduling, procurement of study materials and visual aids, and arranging for field trips to augment instruction.

Another aspect allied to the responsibility of co-ordinating instruction in all departments is the maintenance of an interested neutrality. Each department is kept informed of total teaching schedules as well as of the teaching unit for which it is responsible. This encourages the keeping of proportionate emphasis on specific instruction within a total teaching design. Each department is given representation on interdepartmental panels that deal with overlapping service roles. In this way a student is able to observe effective compromises or justifiable alternatives that result in optimum client services. All instructors participating in a course are invited to the final student critique session. At these sessions members of the teaching staff have opportunity to re-evaluate their presentation through the eyes of the recipient. Thereafter, the staff confers to decide which suggestions might be implemented when this course is given again or what changes instructors have to offer to make the presentation more meaningful. Usually the co-ordinator acts merely as recorder at these sessions and preserves the information, until the next course is scheduled. However, inasmuch as teamwork involves give and take, one must expect occasions when the balance is not arrived at readily. The most frequent difficulty comes from staff members whose lack of security exceeds their competence or whose competitive attitudes exceed their team relationships. These individuals may fail to profit from valid student reactions or fail to realize

why or when they "lose their audience." Therefore, the co-ordinator must find other approaches to this instructor in order to salvage the assets of the individual in a teaching program. These approaches must always respect the contribution the instructor has to make. One approach might be use of selective placement in the teaching schedule—limiting lecture time and augmenting the topic by visual aids, panel discussion, or pertinent field trips. There are times when watchful waiting is preferable to change, and it is the co-ordinator's duty to bring out the positive aspects of the instruction when participating in student seminars. Fortunately, as a teaching team co-operates in a variety of courses, there is ample opportunity for each member to find satisfactions within the many schedules and to enjoy the many students who come with a variety of backgrounds from all parts of the nation and the world.

Analysis of programing is a second area of collective collaboration for which the director of professional education is responsible. The preceding section discussed staff participation in planning courses as well as the precautions to be observed in judging staff capabilities, in using facilities not originally designed for classes, and in considering client commitments. However, one of the greatest pressures placed upon the teaching staff in a rehabilitation center is a popular misconception that learning can come only from working with patients and that anyone in this situation will learn. Not only would this convert a human laboratory into a sightseeing gallery, but it serves little educational purpose. There are many steps to learning practical applications in a rehabilitation setting, and it is the director's responsibility to attempt to keep the method of instruction suitable to the student's background and capacity. Learning to observe, learning to compare, learning to pick the salient points from case histories, learning technics in handling materials, learning to analyze client needs and to participate in team decisions, all precede the information to be gathered by working with a client. Instruction at the Institute gives due consideration to these requirements in setting up course schedules for the sake of the student as well as for the client.

Programs are further analyzed to determine whether (a) course content is serving the most pressing needs of personnel in the field, (b) timing of workshops reaches the people needing them most, and (c) visual aids and study materials carry educational impact.

In addition to co-ordinating varieties of educational experience within the rehabilitation center, the director of professional education is responsible for the center's role within the university community. The Institute is professionally affiliated with New York University and is a member of the University's rehabilitation team. In the past year, the University has set up the Center for

Rehabilitation Services as an arm of University administration concerned with the integration and co-ordination of all education for service to the human being. This Center for Rehabilitation Services, under the direction of Lester J. Evans, M.D., is in contact with all of the University's teaching resources pertinent to rehabilitation, which range from research to academic and clinical instruction. The director of the Institute for the Crippled and Disabled is a member of the Advisory Committee of the Center, and the director of professional education represents the Institute at Center meetings, which bring together educators from the University's academic programs, hospitals, and rehabilitation centers. These educators have reason to believe that "study of human needs and the preparation of persons to meet them can be a unifying force among the many and often disparate parts of the University."¹⁰

When the Institute assumes the major responsibility for courses given for academic credit under the auspices of New York University—such as the prevocational exploration course or the vocational evaluation course—it is the task of the co-ordinator to work out the curriculum in conjunction with departmental representatives from the University and from the Institute. The Institute course instructor has complete autonomy within his subject matter, but it is the education director's job to integrate this program with current teaching schedules and to arrange for interdepartmental collaboration where required. In interpreting the Institute's educational potentialities to the university in terms of the evolution of current training and future plans to meet new training needs, the director of professional education has frequent occasion to consider the questions raised at the University of Florida Conference,⁶ some of which are:

1. In addition to the various medical specialties, what are the areas in rehabilitation for which academic degree programs are essential?
2. Are there personnel needs in these and other areas where short-term and inservice training programs should receive attention?
3. What are the skills and knowledges needed for these various academic degree programs?
4. Are current academic programs in these respective areas satisfactorily supplying the skills needed by the personnel now found in rehabilitation facilities?
5. How have the respective degree programs altered their curriculum in order to adapt to relatively new concepts of care and treatment in rehabilitation?
6. What are the common elements of knowledge and experiences in the various degree programs?
7. Can these common elements be taught in a more meaningful way?
8. What types of experiences can be provided for students of the various disciplines that will develop respect and understanding for related health disciplines?

9. How can the various resources of the university be most effectively utilized in training personnel who are to work as a team in rehabilitation?

10. How can staff and facilities be shared by two or more disciplines of rehabilitation?

Other valuable university affiliations, for which the director of professional education is responsible, are: (a) Co-ordination with the New York University Foreign Student Center on foreign-exchange training programs. (b) Co-operation with the Institute of Physical Medicine and Rehabilitation in orienting visiting professional personnel and students to the aspects of total rehabilitation. By exposing these visitors and students to the medically oriented Institute of Physical Medicine and Rehabilitation and the vocationally oriented Institute for the Crippled and Disabled, one is able to demonstrate the components of functioning, comprehensive rehabilitation under the auspices of a single university. (c) Participation in study privileges in various parts of the University under the faculty tuition-remission program. Members of the Institute's teaching staff are encouraged to pursue graduate study pertinent to professional development and teaching skills. (d) Participation in teaching programs within the University. This has been outlined in previous sections, but it is pertinent to reiterate the stimulating mutual benefits of combining teaching and clinical practice.

The third area of collective collaboration that is the immediate concern of the director of professional education is co-ordination with the health education community—locally, nationally, and internationally. This includes attendance at professional meetings where information (content, methods of presentation, visual aids) that might contribute to the rehabilitation center's teaching program is brought back to the staff. It is at these meetings that the co-ordinator searches for rehabilitation trends so that the center's present programs meet current needs and so that future planning anticipates realistic goals that will harmonize with other rehabilitation efforts on a nationwide basis. It is through these broader contacts that the director translates information pertinent to Institute experiences into teaching methods that take into account varieties of application by recognizing the needs, problems, motivations, customs, and norms of other populations to which this information is to be applied.¹¹

There are adequate compensations for the responsibilities that befall a director of professional education in a rehabilitation center. These are the stimuli that come from information of interdisciplinary scope, from co-operation with instructional teams, and from that quality of student inquiry that reflects mutual respect and reaps mutual learning benefits when sharing experiences in applied education. Allport's comments on teaching goals are a steadying influence in these situations, for with him we are "habitually tempted to present to our students . . . summary statements of our hard-won conclusions

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... hoping thereby to bring our audience rapidly to our own level of knowledge. ... the sad truth is that no one learns from having conclusions presented to him."¹² However, the pleasant truth of problem-centered teaching is the daily discovery that conclusions are dynamic—in the partnership of teaching team and student work within

the laboratory of a rehabilitation center, conclusions are the catalysts that produce the questions of tomorrow. The director of professional education has the gratifying experience of translating this atmosphere of inquiry into a shared educational experience within the rehabilitation center.

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Reprints from Rehabilitation Literature

These reprints belong in your own professional collection and may be ordered in quantity for professional education programs. Inquire for special prices for quantity orders. Orders for less than \$1.00 should be accompanied by payment.

Reprint DR-21

Employability of the Multiple-Handicapped; Work Adjustment in the Sheltered Shop Under Counselor Supervision. By William Usdane, Ph.D., Professor of Education and Coordinator of Special Education and Rehabilitation Counseling, San Francisco State College. (Reprinted from the January 1959 issue.) 25¢ a copy.

Reprint DR-22

Physical Therapy for Motor Disorders Resulting from Brain Damage. By Sarah Semans, A.M., R.P.T., Instructor in Physical Therapy, School of Medicine, Stanford University. (Reprinted from the April 1959 issue.) 25¢ a copy.

Reprint DR-23

Problems of Sensorimotor Learning in the Evaluation and Treatment of the Adult Hemiplegic Patient. By Glenn G. Reynolds, M.D., in collaboration with Signe Brunnstrom, M.A. (Reprinted from the June 1959 issue.) 25¢ a copy.

Reprint DR-24

Amputee Needs, Frustrations, and Behavior. By Sidney Fishman, Ph.D., Director, Prosthetics Education, New York University Post-Graduate Medical School, New York, N.Y. (Reprinted from the November 1959 issue.) 25¢ a copy.

Reprint DR-25

Role Modifications of the Handicapped Homemaker. By Victor A. Christopherson, Ed.D., Professor of Child Development and Family Relations, University of Arizona. (Reprinted from the April 1960 issue.) 25¢ a copy.

Reprint E-27

The Patient's Motion Ability: Evaluation Methods, Trends, and Principles. By Mary Eleanor Brown, M.A., Physical Therapist. (Reprinted from the February and March 1960 issues.) 50¢ a copy.

Speech and Brain-Mechanisms

By Wilder Penfield, M.D.

and

Lamar Roberts, M.Sc., Ph.D.

Published by Princeton University Press, Princeton, N.J.

1959. 286 p. figs., tabs. \$6.00.

Reviewed by Hildred Schuell, Ph.D.

About the Authors . . .

Dr. Penfield, director of the Montreal Neurological Institute since its founding in 1934, is chairman of the department of neurology and neurosurgery of McGill University in Montreal. He received his training at Princeton and Oxford. Dr. Penfield is a fellow or member of the National Academy of Sciences of the United States and of the U.S.S.R., the Royal Society of London, the Académie Nationale de Médecine, France, and the American Philosophical Society. He has previously published six books on neurology, neurosurgery, and neurophysiology.

Dr. Roberts, chief of neurosurgery at the University of Florida Medical School, earned his doctorate in medicine at Duke University, Durham, N.C. He received his M.Sc. and Ph.D. degrees at McGill University for graduate studies on speech defects and neurological localization.

About the Reviewer . . .

Dr. Schuell received her Ph.D. degree from the University of Iowa in 1946. She is associate clinical professor of neurology at the University of Minnesota; director, aphasia clinic, neurology, at the Minneapolis VA Hospital; and associate editor, *Journal of Speech and Hearing Research*. She is a fellow of the American Speech and Hearing Association.

SPEECH AND BRAIN-MECHANISMS is a study of the neurophysiology of language based on 10 years' study of cerebral dominance and language disturbances observed during seizures, sodium amytal injections, electrical stimulation and mapping of the cortex in conscious and co-operative patients, and transient aphasias following circumscribed cortical excisions. It includes a critical review of the literature in relevant fields. The authors have recognized the limitations of their methodology and have scrupulously separated inference and hypothesis from conclusions supported by their data. The result is a book no serious student of cerebral function or language disturbances can afford not to study seriously, for the facts that are presented must certainly be taken into account by investigators working in these fields.

It is important that the readers, as do the writers, recognize what this book does not tell. The authors state specifically that the exploring electrode supplies a discrete and artificial stimulus that cannot be compared to the complex pattern of impulses constantly playing upon the cortex. In the words of Dr. Penfield, "An electrode that is delivering, for example, 40, 60, or 80 impulses per second to the 'arrival platform' of an area of sensory cortex can hardly be expected to imitate the varied pattern of the stream of impulses that must be arriving normally at that platform." The electrode has produced vocalization, an involuntary cry that ceases when the electrode is withdrawn and starts again when it is replaced. It has never caused a patient to say a single intelligible word. It has produced interruptions and distortions of speech, if the patient was talking when the stimulation occurred. Finally, the authors are well aware of the Hughlings Jackson dictum that localizing speech and localizing the damage that destroys speech are two different things.

All the patients in the reported series had incurred some form of

BOOK REVIEWS

brain damage before surgery, and most of them had recurring seizures. The authors state explicitly that their results were obtained from abnormal brains, and they do not know whether or not the findings would be similar if normal brains could be studied in this fashion. It was not possible to produce speech arrest in all the patients in their series. Nevertheless, the agreement from patient to patient in this large series is so great, regardless of the locus of the lesion, that it does not seem probable that significant differences would be found in normal brains, although areas surrounding a seizure focus are more easily stimuable.

Finally, almost all the aphasias observed were transient, occurring during the postoperative period, in the acute stage of the illness. This is undoubtedly the reason that observed symptoms showed little difference from one patient to another. In spite of this general finding, Dr. Roberts is clear in his statement: "Nonetheless, it is believed on the basis of individual cases that particular defects in language may be shown to follow specific cortical removals."

These then are the limitations inherent in the data. This book does not tell how language is produced; it does not tell where in the brain it is produced; it does not describe aphasia produced by localized cortical lesions. It describes a transient and almost global disruption of language occurring, not immediately after excision of an area of cortex, but having its onset a day or several days later, reaching its peak about the fifth postoperative day, usually, and then subsiding. The authors do not ascribe this to the excision, but to what they term a neuromyolytic edema caused by prolonged exposure of the brain to air and ultraviolet rays, as well as numerous electrical stimulations, and to postoperative changes in circulation. The authors themselves are clear and explicit on all these points. They have done important pioneer work that could be discredited too easily by the kind of misleading and overly enthusiastic interpretations they have meticulously tried to avoid.

The records of all patients operated on for seizures from 1928 through February 6, 1951, were reviewed for evidence of speech disturbance during cortical stimulation and for evidence of aphasia before and after surgery. Six hundred and sixty-three operations in 569 patients were reviewed. In 190 cases, 121 involving the left hemisphere and 69 the right, electrical stimulation was carried out. Two hundred seventy-three operations on the dominant hemisphere and a like number on the opposite side were reviewed for the study.

In addition, a special study was made of 72 patients who were tested for aphasia before and periodically after surgery. Tests administered included following directions, naming objects, repeating phrases, and various tests for reading, writing, and arithmetic. While results were not tabulated for the group, individual protocols are com-

plete enough to substantiate the author's statements about them. Of the 45 patients who had surgery in the left hemisphere, 26 (58%) showed language disturbances following surgery, while 19 did not. Twenty-seven patients had surgery in the right hemisphere, and only one of this group had any language disturbance postsurgically.

Of the 569 patients in the original series, 47 were excluded because handedness had not been determined, and 136 because brain injury had been incurred before the age of two, making a shift of hemispheric dominance for language possible. This left a total of 386 patients without brain injury before two years of age, in whom speech arrest from electrical stimulation or postoperative aphasia was observed. Results are shown in the following table:

Occurrence of Aphasia in Right and Left-Handed Patients After Surgery in the Left and Right Hemisphere

| Surgery in the Left Hemisphere | | | | Surgery in the Right Hemisphere | | | | Sig. Level of Difference |
|--------------------------------|-----|---------|------|---------------------------------|-----|---------|-----|--------------------------|
| Hand | N | Aphasic | % | Hand | N | Aphasic | % | |
| *R | 157 | 115 | 73.2 | R | 196 | 1 | 0.5 | <.001 |
| *L | 18 | 13 | 72.2 | L | 15 | 1 | 6.7 | <.001 |
| Total | 175 | 128 | 73.1 | Total | 211 | 2 | 0.9 | <.001 |

*(Includes patients classified as predominantly left or predominantly right-handed)

Thus, when patients with injury early in life are excluded, there is no difference in the incidence of aphasia after operation on the left hemisphere between the left-handed and the right-handed. After operation on the right hemisphere, the left-handed had aphasia 13 times as often as the right-handed, but this difference is not statistically significant, since only one left-handed and one right-handed patient was in this group. Left-handed patients had aphasia 10 times as often after operation on the left hemisphere as on the right; this difference is extremely significant and makes it necessary to revise the old theory that aphasia occurs in left-handed patients after injury to the right hemisphere.

The authors identified four important sensory areas in the cortex: the visual, auditory, and sensory somatic areas, which are of course well established, and a secondary somatic sensory area in the superior aspect of the Sylvian fissure. However, the present authors, from the results of cortical excisions, conceive of these not as "end-stations," but as transmitting areas, through which impulses from the eyes, ears, and body flow to subcortical ganglia, probably in the thalamus. The same view is held of the primary and secondary somatic motor areas in the frontal lobe. The authors do not believe that the stream of neuronal impulses that produce voluntary activity originate in the cortex but, rather, come from a subcortical source, a part of what they term the centrencephalic system, which they consider the highest integrative level of cerebral function. They consider it possible,

but not certain, that selection and reorganization of the flow of impulses and, possibly, some kinds of trans-cortical communications occur in the cortex.

Of special interest were the responses evoked from what Dr. Penfield has labeled the interpretive cortex of either temporal lobe. Stimulations in this area, and no others, produced psychical phenomena corresponding to the "dreamy states" described by Hughlings Jackson in patients with temporal lobe epilepsy. When the electrode was applied, patients re-experienced past situations as "flash-backs" or dream sequences, which they sharply differentiated from present or immediate experience. Other stimulations in this area produced altered perceptions of the present; everything seemed smaller, or to have happened before. Dr. Penfield concluded that every individual "forms a neuronal record of his own stream of consciousness" during his lifetime, which is astonishingly complete, but cannot be reactivated voluntarily. He hypothesized that these can be "appropriately selected by some scanning process . . . for the purposes of comparative interpretation," and considers that the interpretive cortex of the temporal lobe is involved in recall, comparison, and interpretation. The posterior part of the interpretive cortex seems to overlap the speech area in the left hemisphere.

Vocalization was obtained from stimulation of both the precentral and postcentral gyri of both hemispheres, in the same areas that yielded movements of the lips, tongue, and jaw during stimulation and also from the supplementary motor area, including the superior and medial aspects of the precentral region in both hemispheres. Arrest of speech, if the patient was attempting to talk when the electrode was applied, as well as hesitation, repetition, distortion, and slurring were also produced by stimulation of these areas in both hemispheres.

The same negative effects, as well as inability to name with retained ability to speak, confusion of numbers while counting, perseveration, and misnaming occurred during application of the electrical current to Broca's area, the supplementary motor area, and the inferior parietal-posterior temporal area in the left hemisphere. Electrical interference in a given area was effective only about 50 percent of the time and could not be produced in all patients, even when transient aphasia occurred post-surgically. The authors stressed the fact that they observed area and not point localization, and they were unable to differentiate the effects of the current on one language area from its effects on any other, in the left hemisphere. They considered that these data supported the previous conclusion that the left hemisphere is usually dominant for speech regardless of handedness, with the exclusion of those who have had cerebral injuries early in life.

Aphasia occurred immediately after surgery on the left hemisphere only 22 times in 273 operations and did not occur immediately after surgery involving the right

hemisphere. Speechlessness, usually associated with weakness on the right side of the body, was the common finding. Location of the lesion did not seem to influence the type of difficulty except in one patient in whom temporal and frontal biopsies were done and who experienced partial auditory imperception. Absence of immediate dysarthria was observed in several cases after excision of the precentral and postcentral face area and in one of removal of Broca's area. The authors concluded that any limited, previously damaged area of the left hemisphere may be removed with transient, but without immediate or permanent, aphasia so long as the rest of the brain functioned normally.

Persistent speech disturbance occurred in 14 patients who had operations on the left hemisphere for lesions other than tumor; all of them had continuing seizures.

The fact that patients with aphasia after the initial injury again had aphasia after surgery for the excision of scars was considered to indicate that the left hemisphere still functioned for speech in these cases.

Exceedingly meaningful summaries are presented of histories, procedures, and findings for 20 patients included in the special study. Some of the conclusions drawn by Dr. Roberts from this series are as follows:

1. "Lesions in particular localities may result in specific clinical syndromes. Lesions in the region of the precentral face area and of Broca's area may cause dysphasic disorders which are predominantly expressive in type. This does not mean that a center for eupraxia, and another center for movements of the lips, etc., have been destroyed. There is no specific site where what Nielsen calls the motor engrams of speech are stored."

2. "Generally we believe that lesions near the junction of the dominant parietal and occipital lobes may produce aphasic disorders, with the most pronounced difficulty in the visual sphere. But there is no localized center in the angular gyrus for the recognition of letters, numbers, or words."

3. "Terms such as those of agnosia, particularly when subdivided into visual verbal, visual literal, etc., do nothing but confuse us. There is not a single case in the literature of visual verbal agnosia without other defects, together with the ability to recognize some word at some time if the examination is detailed enough."

4. "In an individual who has learned two or more languages, if one language suffers with a cerebral lesion, all languages suffer."

5. "We believe that the most important area for speech is the posterior temporo-parietal region. . . . The next important area for speech is that of Broca, including the three gyri anterior to the precentral face area. The supplementary motor area . . . is dispensable; nonetheless,

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lesions here can produce prolonged dysphasia, and it probably is very important if the other areas for speech are destroyed."

6. "If one of the speech areas is destroyed, then adjacent areas of cortex and the other speech areas function during speech."

7. "Persistent aphasia may occur during abnormal function or with extensive destruction of the left hemisphere. Attempts should be made to control or to excise any abnormally functioning brain to allow the patient the best chance for the recovery of language."

Probable subcortical mechanisms of the speech cortex were explored by Dr. Penfield in association with Dr. Herbert Jasper, and diagrams and cross sections showing projections to the thalamic nuclei and two-way connections between the cortex and the centrencephalic system were presented. Some of these projections were extrapolated from animal to man. In addition dissections of the human brain in fixed sections prepared by Professor Joseph

Klinger of the University of Basel, showing fiber connections between the speech cortex and the thalamus, are shown. While present neurophysiological evidence must be considered inconclusive and further developments must be awaited, the hypothesis that subcortical as well as transcortical mechanisms must be taken into account in language function appears to be incontrovertible.

In the final chapter Dr. Penfield expresses some provocative ideas on the learning of languages that deserve the consideration of educators and psychologists, although they probably need to be weighed against other relevant data.

The value and purpose of this book is best summarized in the words of Dr. Penfield: "The clinical and physiological observations we have made should serve as permanent building stones. The deductions and hypotheses must face the tests of time. And if they are proven wrong, we may still take comfort in the hope that, before they are discarded, they will have served a useful purpose to explorers who pass this way."

Other Books Reviewed

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Anatomy; A Regional Study of Human Structure

By: Ernest Gardner, M.D., Donald J. Gray, Ph.D., and Ronan O'Rahilly, M.Sc., M.D.; illustrated by Caspar Henselmann

1960. 999 p. illus., figs., tabs. W. B. Saunders Co., W. Washington Square, Philadelphia 5, Pa. \$15.00.

AS STATED in the preface, major aims of the authors were to: 1) provide a textbook sufficiently brief for the undergraduate medical and dental student in the present shortened course of human anatomy; 2) present information on living anatomy, stressing the relationship between structure and function; and 3) cite relevant references meeting the needs of the more advanced student and postgraduate worker. With the exception of 10 introductory chapters, mostly of a systemic nature, the remainder of the book follows a regional approach to the subject. Because the book is not intended as a laboratory manual or a textbook of surgical anatomy, systemic considerations have not been excluded in the regional approach. Special fields of neuroanatomy, histology, embryology, and comparative anatomy are largely omitted. For material on living anatomy, the contents of Dr. O'Rahilly's book

Living Anatomy (Cork University Pr., 1949) have been used extensively in the preparation of the present book. A glossary of eponymous terms and a well-organized index are included.

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Arthritis and You

By: James W. Brooke, M.D.

1960. 150 p. Harper & Bros., 49 E. 33rd St., New York 16, N.Y. \$3.00.

PLANNED FOR USE as an adjunct to medical treatment, this book provides the layman an opportunity to learn the essential facts concerning arthritis and its treatment. Dr. Brooke, in addition to qualifying as an authority on the disease, is an extremely able writer with a deft touch for the humorous phrase. He sketches the history of arthritis in its many forms, discusses past and current trends in treatment, points out the role of surgery, and hopefully notes the advances in research in the field. Patients and their families should gain from the book much practical information on how to accept and live more comfortably with the limitations imposed by arthritis.

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The Clown Family Speech Book (We Want Toto)

By: Morris P. Pollock and Miriam S. Pollock; illustrations by Alice Freeman and Dr. Miriam Pollock

1960. 66, 38 p. illus. Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Ill. \$6.50.

SPEECH CORRECTION technics built around the story of the home life and family ties of a group of clowns of varying ages provide fun, relaxation, and an opportunity for the child with speech problems to participate actively in the development of correct speech. Suggestions for the teacher on the use of the book and the accompanying workbook (38 p.), found in the last section, define the purpose of each of the five chapters of the story and the activities planned to develop memory, reception, and expression. The accompanying workbook is available separately. The authors direct the Pollock School in Brookline, Mass., a boarding and day school for the mentally retarded and emotionally insecure. Their book *New Hope for the Retarded*, published in 1953 by Porter Sargent, contains many practical suggestions for teaching "speechless" children to talk.

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50 Jahre Körperbehindertenfürsorge in Deutschland; Gedenkschrift Anlässlich des 50 Jährigen Bestehens der

Deutschen Vereinigung zur Forderung der Körperbehindertenfürsorge

By: Kurt Lindemann

1960. 63 p. illus. Published by Georg Thieme Verlag, Stuttgart, Germany, and available in the United States and Canada from Intercontinental Medical Book Corp., New York 16, N.Y. 70¢.

DR. LINDEMANN traces the development of services for the physically handicapped in Germany from the nineteenth century to the present day, the establishment of the German Society for the Welfare of the Crippled, and its work during World War I and the following decade. During the general world economic crisis of the 1930's many difficulties were encountered and overcome, eventually bringing the organization to its present position of recognition. Also included are a brief bibliography and a listing of officials of the organization from the time of its founding. Official congresses and their chairmen, from 1910 to 1959, are indicated.

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A Joint Enterprise in Education for the Health Professions; Five Years' Experience with an Interdisciplinary Teaching Program at Western Reserve University

By: Amasa B. Ford, M.D.; John L. Campbell, M.A.;

Leg Amputees in the Current Literary Scene

TWO RECENT literary works that include amputees among their chief characters are *Peter Stuyvesant and His New York: a Biography of a Man and a City*, by Henry H. Kessler and Eugene Rachlis (1959. Random House, 457 Madison Ave., New York 22, N.Y. \$4.75), and the novel *One Hour*, by Lillian Smith (1959. Harcourt, Brace and Co., 750 Third Ave., New York 17, N.Y. \$5.00). Neither book is directly concerned with the psychological implications of a handicapping condition, but each for its literary merit well deserves the attention of rehabilitation workers. We recommend the books for leisure-time, professional reading.

Peter Stuyvesant is regarded as America's first leg amputee but no one really knew which leg he had lost until Dr. Kessler found a letter written by Stuyvesant in 1644 that revealed the right leg to be the one amputated. Dr. Kessler is the world-famous authority on amputee rehabilitation, the founder of the Kessler Institute for Rehabilitation in West Orange, N.J. The

book that he and Eugene Rachlis wrote is an authoritative history of the early days of New Amsterdam under the governorship of a man whom the Indians called "Wooden Leg." It documents the struggle between the citizens of the new world and the West India Company, whether or not the settlement should achieve its natural growth as a colony or remain as a company fur trading post.

In *One Hour*, Lillian Smith is concerned with the suspicions and violent emotions aroused in a southern community by the accusation of a small girl that a man molested her in a vacant store. The narrator in the story is the Episcopalian clergyman—a leg amputee—the closest friend of the gifted scientist, whom the girl accused, and his wife. The novel probes deep into the dynamics of good and evil, and the result is a fascinating study of the subtleties of human relationships. Miss Smith is the author of *The Journey*, which is familiar to readers of *Rehabilitation Literature*.

—The Editor

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Alexander P. Orfirer, M.D.; Valencia N. Prock, R.N.; Louise M. Suchomel, R.N.; and Hope B. Williams, M.S.

1959. 104 p. tabs. Mimeo. Paperbound. Rehabilitation Teaching Program, Western Reserve University, 2107 Adelbert Rd., Cleveland 6, Ohio. \$1.25.

AN INTERDISCIPLINARY staff comprised of an internist director, a psychiatrist, a public health nurse, a social worker, a physical therapist, and a vocational counselor developed the program of instruction in comprehensive care of chronically ill patients. The Rehabilitation Teaching Program has operated since 1954 principally in an outpatient teaching clinic known as the Continuity Clinic where medical, nursing, and social work students gain practical experience in the particular area of care. The report consists of descriptions of the development and operation of the program, its educational features, relationships of the program to the university and to the community, costs and financing, and evaluation by students, preceptors, and staff.

Papers of the six authors included here are: The medical director's job, Amasa B. Ford.—A vocational counselor's view, John L. Campbell.—The role of the psychiatrist, Alexander P. Orfirer.—Report of public health nurse, Valencia N. Prock.—Report of the physical therapist, Louise M. Suchomel.—Report of the social worker, Hope B. Williams.

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Social Science in Nursing; Applications for the Improvement of Patient Care

By: Frances Cooke Macgregor

1960. 354 p. Russell Sage Foundation, 505 Park Ave., New York 22, N.Y. \$5.00.

THE CONCEPT of "treating the total person" necessitated broadened training for nurses and members of the medical profession; disciplines concerned with human behavior and attitudes are being recognized as essential for inclusion in the curriculum. Based on a three-year experimental project conducted at Cornell University-New York Hospital School of Nursing with the support of the Russell Sage Foundation, this book interprets the role of social sciences in patient care and shows how such concepts can be used to advantage in courses offered to students. Part I presents a general discussion of the need for social sciences in nursing education and their relation

to problems in health and illness. Part II describes the experiment and results of training courses as observed in better nursing and patient care. Part III, in conclusion, discusses the problems of collaboration between members of the nursing and social science professions. Chapter 6, in Part II, deals at length with the psychosocial aspects of physical disability and rehabilitation. Although the book was written primarily for the nursing educator, administrator, practitioner, and nursing student, those working in social science and rehabilitation fields should find it stimulating and informative. Case histories and reports of nursing experiences illustrate graphically situations arising from lack of understanding by medical personnel of the social and cultural aspects of human behavior.

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University of Michigan Symposium on Gerontology

Edited by: Wilma Donahue, Ph.D.

Published in: *Geriatrics*. April, 1960. 15:4:221-325. Issue available from *Geriatrics*, 84 S. 10th St., Minneapolis 3, Minn. \$1.25 a copy.

THE APRIL, 1960 issue of *Geriatrics* reports studies growing out of the research-demonstration program in the rehabilitation of older patients in county medical care facilities, undertaken by the University of Michigan's Division of Gerontology, Institute for Human Adjustment. Dr. Donahue serves as Chairman of the Division. Reports of subsequent symposia and current studies at the University will appear in later issues of the periodical.

Contents: Gerontology at the University of Michigan; the historical perspective, Wilma Donahue.—Design for a study of geriatric rehabilitation, Wilma Donahue and James W. Rae, Jr.—Medical appraisal of elderly county hospital patients, Ralph L. Brandt and C. John Tupper.—Neurologic findings in county hospital patients, Robert D. Currier.—Rehabilitation of geriatric patients in county hospitals; a preliminary report, Wilma Donahue (and others).—Michigan survey of geriatric nursing facilities, Kenton E. Winter.—Communication problems among aged county hospital patients, H. Harlan Bloomer.—Study of two county hospitals; medical care needs and rehabilitation potential, Edwin M. Smith, Ralph L. Brandt, and Robert D. Currier.—Dental conditions of county hospital patients, Adelmo Di Napoli, Richard H. Kingery, and Paul Gibbons.—Decreased carbohydrate tolerance in elderly patients, Ralph L. Brandt.

Journal articles, chapters of books, research reports, and other current publications have been selected for digest in this section because of their significance and possible interest to readers in the various professional disciplines. Authors' and publishers' addresses are given when available for the convenience of the reader should he desire to obtain the complete article or publication. The editor will be most receptive to suggestions as to new publications warranting this special attention in Digests of the Month.

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The Role of the Counselor in Rehabilitation

By: Arthur D. Burdett

In: *Habilitation Rev.* Jan.-Feb., 1960. 3:1:1-14.

THE VOCATIONAL rehabilitation counselor, unlike the vocational counselor, deals with the handicapped, for whom the psychological aspects of disability may do more harm than the disability itself. He works both with the disability and with the way the client is reacting to his disability and to his self-concept or bodily image. Essential then to realistic vocational rehabilitation are proper counselor-client relationships. The counselor must: establish a warm and secure relationship and gain rapport through acceptance of the client and his statements; offer the client an emotional release by allowing a free expression of emotions; interpret and direct the client's remarks meaningfully without harm to the self-image; help the client develop insight into his problem—knowledge of the needs of the client and a realistic and objective evaluation are essential; be able to handle dependency or transference relationships that arise; and recognize whether the client is accepting, ignoring, or denying an experience to his self-esteem and the manner in which he does it. The client must gain understanding of his problem, strengthen his self-esteem, and improve his social awareness and adjustment.

In the counseling process the counselor must avoid certain pitfalls. Although authorities usually concede that emphasis in vocational rehabilitation is on total personality and not on the specific disability group, an approach constantly used is the nomothetic (study of masses so that norms may be derived for study of the individual). This is seen in projective technics and intelligence testing, in comparisons dealing with statistics, and in the sciences. Thus, influenced by the culture in which he lives, the counselor may give only lip service to a basic principle of rehabilitation. He may generalize one job possibility, one type of treatment, or one method of counseling for specific disability groups.

The counseling session itself presents a problem. The counselor believes he is taking an objective viewpoint of a subjective situation. How can one be objective about a subjective situation? The counselor's biases cannot be eliminated so that events will be recorded accurately. Also, the client is biased—he will rate himself too high or too

low or may set too high a goal. The psyche is selective and what is wanted will be remembered, the rest forgotten or repressed. If the counseling session is viewed as a threat to either or both parties, the defense mechanisms of the ego take charge unconsciously. Expectation also enters: What does the client expect the counselor to want to hear, and what does the counselor expect, anticipate, or desire to hear? Are the observed behavior and characteristics true? Does the client say things he would also say outside the situation imposed? I do not want to appear too pessimistic. A skilled, trained, and properly supervised counselor would be able to make some meaningful and insightful correlations between the individual and his relation to others.

The "role" of the counselor is influenced by his personal qualifications, his philosophy of life, his personal characteristics, his training or experience, and the setting in which he functions. In a hospital or total rehabilitation center, his role may be as a specialized member of a team of experts, responsible for the vocational counseling and placement of the client. In surroundings with less specialized services available, his role may be that of coordinator, expected to have an overlay of paramedical knowledge as well as a working relationship with many allied subjects.

How much training is needed for those in rehabilitation professions? A mistake of the vocational counselor can perpetuate itself for years in the client, his family, and eventually his community. The rehabilitation counselor must become well versed in the various disciplines with which he works. The core of training curriculum should relate to the physiological sciences, introduction to clinical medicine, social organization and social pathology, psychological technics, and the influence of culture on personality. Of prime interest to the counselor is knowledge of physical restoration and of medical management problems for, without an understanding of responsibility in these areas, the whole program of rehabilitation must eventually fail. The counselor must have a basic understanding of the client's medical condition, its etiology, prognosis, possible side effects, and so on. He must also know what the possibilities of employment are with the specific disability.

Thus, a vocational counselor must be a scientist, informed of the world about him and interested in observation, classification, hypothecation, and experimen-

tation, leading to prediction and verification and then to laws. He must be a diagnostician—he must be able to present the dynamics and etiology of the disability and relate these factors to the adjustment problems manifested. He must have access to and be able to interpret information found in psychological, neurological, and medical examinations and be able to synthesize material obtained and deduce relevant correlations and conclusions. As a researcher, he must be a competent statistician, able to analyze mathematical results, deduce meaningful correlations, and present the information suitably. A counselor must be a teacher and an ethical person. He must also know the facilities in his community and what they offer—only then will effective rehabilitation of clients be other than a hit-and-miss affair.

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Long-Term Illness; Management of the Chronically Ill Patient

By: **Murray B. Ferderber, M.D.** (5722 Fifth Ave., Pittsburgh 32, Pa.)

In: *Pennsylvania Med. J.* March, 1960. 63:3:390-394.

WHO AMONG US can fail to remember the plight of an aging or chronically ill patient in our average hospital? The greatest burden of such patients' medical care is borne by the diminishing corps of general practitioners. Having our future specialists engage first in general practice would result in better specialists, and better general practitioners as well. Before entering specific fields, the future medical graduate could be able to absorb some physical, emotional, and professional experience in the care of humans. Let us look at the broad aspects of the problem of the chronically ill patient from two standpoints: the family and the physician.

The Family

By the time illness is recognized as chronic or long-term, the household is physically and economically destitute, especially if the wage-earner is ill. We learned much from World War II, with its injuries resembling "strokes." Now, instead of waiting out the period ending in demise or physical recovery, we know how to give definitive early medical care and also that positioning of affected extremities prevents deformities and permits early movement. Although early ambulation is vital, professional and personal fear for older patients urges too great caution. The older the human mechanism, the sooner and more gradual should be the movement.

The pattern of "continence by habituation" induced in the young can be interrupted temporarily by a long-term

illness but not broken, except in spinal cord injury or terminal illness. A simple technic of offering bed pan or urinal upon awakening, 20 to 30 minutes after each meal, once between meals, and again before retiring will restore continence in short order.

Unfortunately the simplicity of an amputation, especially among the older patients, too frequently results in unnecessary invalidism. The oldster can find no consolation in using crutches, no matter how routinely we prescribe them. Also fear of falling has increased with age. Simple pylons, either commercial or home-devised, are preferable to vegetating in a chair or bed.

Simple devices for home management.—Purchased or rented overhead rails for the bedridden are usually expensive. An improvisation is two 2 x 4 inch uprights, one at each end of the bed, and a 2 x 6 inch for the overhead. For pulling up, pulleys (monkey bars or other device) can be suspended. Foam rubber mattresses help prevent ulcers but are costly. Weight will be distributed over a greater area with a bed board (for semirecumbency, hinged or separated at the head break). Turning the body every two to four hours is urgent to prevent pressure for too long. In paraplegia or other spinal cord injury, the patient after turning should check that his legs are not crossed, as gangrene can result. Qualified plastic surgeons believe skin lotions have little value in preventing pressure sores. Cleanliness, periodic relief of pressure, and prevention of abrasions are sounder.

Complete inactivity reduces the vital capacity, hurries osteoporosis, and produces indolence difficult to overcome. Activity tends to energize the patient toward standing and ambulation. In ambulation, slippers are unnecessary since they weaken the feet and cause difficult patterns of walking. "Lifting" or virtually "carrying" patients as ambulation is undesirable. Before leaving the bed, the patient should be taught simple exercises to strengthen the quadriceps and prevent "weak knees."

The sickroom chair should be firm, with arms, and no deeper than the 90 degrees of the angle of the knees with the patient sitting. The patient should approach the chair, when close turn so the calves touch it, and then use *both* arm supports to lower himself; this prevents fractured femurs as a result of a chair's tipping when the body is supported on only one arm. Three-legged stools are booby traps and have no place in a sickroom.

Foam rubber used properly is a boon to the chronic invalid who needs to sit for long. The average seat is from 18 to 22 inches and made of 4-inch thick foam rubber with the hind portion cut out in horseshoe shape to spare the coccyx and sacrum from too severe pressure. A protective, liquid-proof covering is desirable, since, once excreta invades the cellular structure of foam rubber, the foul odor resulting cannot be relieved.

When night sedatives are necessary, the use of bed rails is wise (with the reason carefully explained to allay

the patient's fears). A soft low wall-type light should be used, especially to light the way to the bathroom, which should be clear. Useful in the bathroom are: hand rails for shower or tub; tub seat to prevent toppling; for the arthritic, limited in flexion of the knees or hip, a raised toilet seat, which can be easily constructed or bought.

In the arthritic, painful restricted shoulders, often periarticular, can be relieved by having the recumbent patient raise a broomstick grasped in both hands as far as possible, thus increasing range and giving exercise. Since the scapula are stabilized and true humeral movement results in stretching the soft tissue about the shoulder, this is simpler and more effective than pulleys or the shoulder wheel.

Squeezing the conventional rubber ball is most unsound since it can be compressed only so far; "alienation" or confusion of flexors versus extensors of the hand results in detriment to the patient. Wallpaper cleaner, modeling clay, or the silicones are much better and offer purposeful activity.

Metatarsal bars are truly helpful to the arthritic or others who have lost the "take-off" in walking. Frequently they are prescribed to cobblers not versed in body mechanics, with painful and undesirable results. Stand behind the patient, mark the sole of the shoe at the first and fifth metatarsals, remove the shoe, and draw a line between the marks. Prescribe that the leading edge of the bar be about $\frac{3}{8}$ to $\frac{1}{2}$ inch behind this line and the trailing edge no farther back than the parallel sides of the shank. This will assure good positioning virtually every time and give better walking support.

In the spinal sclerotic (multiple sclerosis, amyotrophic disseminated sclerosis), the gradual shortening of the hamstring muscles causes painful seating and rising and waning energy. To stretch these muscles, with the patient in a back-lying position on the floor, prop an ironing board or table leaf against the wall and place his leg on it. This helps stretch the muscles gradually and gives vast relief. Excessive heat weakens the multiple sclerotic and excessive cold makes him stiff and movement difficult.

In my opinion, the preceding suggestions should be taught in the clinical years of the medical student's course since so many patients today have long-term illness.

The Physician

In too few of our schools is attention given to the social and economic factors of our clinical material. The protection of clinics, laboratories, and other magnificent facilities shield embryo physicians from the realities of everyday human experience. Could we not train practitioners as better specialists in general practice? Schools of medicine must enlarge their horizons for specialists in separate disciplines as well as in general practice. We should develop better physicians in all fields.

To assist the general practitioner and his fellow specialists, planning on a community basis is indicated. Visiting services are needed, especially for long-term patients. Hospital charges for them are out of range. The less densely populated areas suffer from lack of visiting nurse services; their numbers and sectional groups of personnel are too few. A suggested method of alleviating the lack of sufficient medical care for the long-term patient is for the practitioner visiting the homes to have at his command intern-resident trainees on a preceptor basis, visiting nurses, technicians, dietitians, and others. Workshops, sheltered where needed and giving training when indicated, could add many people to our labor pool and make for independence rather than "relief." The medical society in Pennsylvania has commissions working in this direction; policies being worked on must drift down to the local level—the county medical societies. Help and guidance are needed from the parent organization. This could be as demonstrations and interval refresher courses, *not in large medical centers* but in areas where such aid is needed by overworked practitioners and their paramedical assistants.

Welfare personnel must be interested in more than acting as dispensers of money; they must be trained to analyze the needs of relief clients in terms of science and sympathy. In the interest of the long-term ill, it is expedient to avoid being penny-wise and pound-foolish. A program of education may eventually teach the public that anyone can be afflicted with long-term illness of any variety. The public must insist upon good medical care in institutions and that personnel of all types receive adequate compensation.

The Pennsylvania Medical Journal is published monthly by the Pennsylvania Medical Society, 230 State St., Harrisburg; subscription rate, \$5.00 a year, 50¢ a copy.

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Accidents in a Department of Physical Medicine

By: R. Harris (*Devonshire Royal Hospital, Buxton, England*)

In: *Annals Phys. Med.* Feb., 1960. 5:5:156-162.

MANY PHYSICAL THERAPY departments are badly sited, badly planned, poorly lighted, understaffed, and overworked besides having much potentially dangerous apparatus. It was thought of value to investigate the safety of a large, busy physical medicine department. Obvious defects were corrected before the investigation: lighting and flooring were tended to, power points made uniform, and unsuitable or rickety plinths withdrawn. All departmental staffs were fully trained persons, students and visiting therapists worked under supervision in the physiotherapy and occupational therapy departments

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(none were involved in accidents), and students in the hydrotherapy school were all qualified physiotherapists.

All accidents in the physical therapy department or elsewhere involving a patient receiving physical treatment or a patient preparing for, going to, or returning from physical treatment were reported for a four-year period. Reporting standards were high. Mainly patients with severe locomotor disease are treated in the Devonshire Royal Hospital. About 200,000 treatments are given annually (physiotherapy, 150,000; hydrotherapy, 5,000; occupational therapy, 45,000) to around 1,000 inpatients and 1,000 outpatients, the latter receiving about one-tenth the number of treatments inpatients do. In the period studied, about 800,000 treatments were given to about 4,000 each of inpatients and outpatients. Of 43 accidents occurring during the four years, 5 affected staff, 7 outpatients, and 31 inpatients. For patients the accidents/treatment ratio was less than 0.005 percent.

Staff Accidents.—Among the staff were two minor lacerations of the hand, one case of scalding when instructions for emptying a small instrument sterilizer by a tap were disobeyed, and two cases of falls from stools. One fall was by an orderly fixing a curtain and the other by a physiotherapist adjusting a sling suspension apparatus. The stools that tipped over had overhanging edges and are being replaced by flush-edged stools. Each treatment room now has a pair of lightweight double steps. The sling suspension apparatus was reviewed; the over-all height on this and all others has been shortened 14 inches without significant loss of function.

Patients' Accidents.—Thirty-eight patients had accidents. Their ages were uniformly distributed, except for a higher concentration in those 59 to 69. The proportion of neurological and hemiplegic patients involved more than doubles their incidence in the hospital population. One such patient was involved in two "burns" accidents. Accidents fell into four main groups: burns, 5 cases; falls or slips whilst walking, 9; falls or slips from plinths, chairs, or apparatus, 17; miscellaneous, 7.

Four burns (all in men) were short-wave and one ionization. None were from faulty electrical equipment, heating lamps or cages, ultrasound, or ultraviolet light. Faulty technic caused one short-wave burn: a hemiplegic man aged 35 without sensory loss had a linear second-degree burn of the thigh that took three weeks to heal, definitely a cable burn. He did not complain during treatment. Two others had small blisters—one had felt warm during treatment but on inspection no abnormality was seen. The next day a 1-inch blister formed. Both patients with blisters sweated heavily while treated. The pad used was 6½ x 10 inches and was applied over two thicknesses of lint and two felt spacers. The fourth burn occurred in a confused old man. The electrode used was 4½ x 7 inches and was applied over four felt spacers 8 x 11

inches. The next day he had a 2 x 2½ inch raw area that did not look like a burn. The iontophoresis burn (superficial blistering) occurred under a wedding ring that could not be removed for treatment of the metacarpophalangeal joint of the ring finger. The ring had been smeared with petroleum jelly and care taken that it would not come in contact with the electrode and fluid. The patient did not complain during treatment (2mA for 5 minutes).

Of nine cases of slips or falls whilst walking (all in women), six were during unsupervised walking in or from the treatment area and three in supervised activities: stair climbing, a walking game, and walking exercises. One may have been a stress fracture (supracondylar).

Six (nonserious) falls were from plinths, all when the patient was turning or moving. These patients were 20 to 66 years of age. As they were not grossly disabled, supervision was perhaps inadequate. Three had neurological disorders with co-ordination problems. Three minor accidents occurred with chairs or stools. In one a stool leg gave way. Wheel chairs figured in eight (trivial) accidents. Six chairs had extension leg pieces. Patients fell getting in or out of a chair; usually the braking was inadequate. The patients were all rheumatoid arthritics with multiple deformities.

The seven miscellaneous accidents were varied. A "burns" patient pulled a netball stand on to him in a games class and also cut his hand on a workshop saw. The neck of the humerus was fractured when staff lifted a very osteoporotic, ankylosed rheumatoid arthritic from a chair. A rheumatoid patient with fixed knees caught a stocking gadget in a varicose vein, breaking the atrophic skin, causing a dramatic haemorrhage.

Actions Taken.—Nonskid surfaces have been put in where possible. Over £3,500 has been spent in placing rubber flooring in passageways with heavy use. Treatment room floors have received a nonskid finish. All plinths have been checked and high plinths used only when technic makes them necessary, as in massage. A regular check of apparatus and furniture is made. A more stable chair has been introduced and rubber ferrules added to the legs of others. Old wheel chairs have been replaced with more stable, more easily managed chairs. Extension footpieces are used only when essential. After trial of several systems of overhauling wheel chairs, the hospital engineering service was made responsible. The new type of chair has brought problems; two patients have been lacerated on the legs by the new folding footpiece, which has a razor-sharp edge.

This investigation showed us unsuspected weaknesses, as we had eliminated suspected hazards previously. Our accident rate is surprisingly low, since our patients are more seriously disabled than those in a general hospi-

(Continued on page 202)

Abstracts of Current Literature

This abstracting section, together with other numbered references indexed in this issue, serves as a supplement to the reference book *Rehabilitation Literature 1950-1955*, compiled by Graham and Mullen and published in 1956 by the Blakiston Division of McGraw-Hill Book Company, New York. An author index will be found on the last page of the issue.

ACCIDENTS

397. Marcus, Irwin M.

An interdisciplinary approach to accident patterns in children, by Irwin M. Marcus (and others). Lafayette, Ind., Child Development Publications, 1960. 79 p. tabs. (*Monographs of the Soc. for Research in Child Development*. Ser. no. 76, 1960. 25:2)

A total of 68 children, between the ages of 6 and 10, 63 mothers, and 47 fathers were studied intensively by psychiatrists, psychologists, and social workers through interviews and tests. A comparison was attempted among an accident group, a nonaccident control group, and a group composed of enuretic children. The accident pattern appeared here to be related to emotional problems but not to a specific diagnostic category. Findings did not support the theory that accident behavior is "unconscious suicide" or hostility turned inward and generated by revolt against inhibiting authoritative or punitive parents. Therapeutic and preventive measures are suggested. Method of the study is described, with questionnaire forms included.

Available from Child Development Publications, Purdue University, Lafayette, Ind., at \$2.50 a copy.

See also 396.

AMPUTATION

398. Felder, Davitt A. (350 St. Peter St., St. Paul 2, Minn.)

Pain and amputations for circulatory disease. *Phys. Therapy Rev.* Mar., 1960. 40:3:183-186.

In same issue: Bilateral above-knee amputee with "stubbies," Richard V. McDougall, p. 186-187.—Amputation associated with peripheral vascular disease, Marion G. McLenahan, p. 188-189.

The author notes that arteriosclerosis is currently the main indication for amputation. Where pain is a major symptom, early amputation is urgent. Postsurgical management, the fitting of the prosthesis, and the causes and treatment of pain following amputation are discussed.

The case histories presented by McDougall and McLenahan illustrate rehabilitation technics used with two patients who experienced considerable pain following amputation of lower extremities.

See also 470; p. 185.

AMPUTATION—EQUIPMENT

399. Gordon, Everett J. (2007 Eye St., N.W., Washington 6, D.C.)

Clinical experiences with the S.A.C.H. foot prosthesis, by Everett J. Gordon and Joseph Ardizzone. *J. Bone and Joint Surg.* Mar., 1960. 42-A:2:226-234.

The Solid Ankle Cushion Heel prosthetic foot, now manufactured commercially and in general use in the U.S. and Canada, was developed at the University of California in 1955. Its structural and functional characteristics, advantages and disadvantages, as well as results of its use in 123 amputees subjected to follow-up study, are discussed. The S.A.C.H. foot represents a significant advance in prosthetic research.

AMPUTATION—EQUIPMENT—RESEARCH

400. Allen, C. E. Lewer (Dept. of Orthopaedic Surgery, Univ. of Cape Town, Cape Town, S. Africa)

The University of Cape Town artificial limb. *S. African Med. J.* Feb. 13, 1960. 34:7:125-133.

In same issue: The University of Cape Town artificial limb (an editorial). p. 135-136.

In this prosthesis, the foot and knee are coupled together in such a manner that dorsiflexion of the foot produces flexion of the knee; constant control during bending of the knee makes for safety, comfort, and more normal habits of walking. Detailed working drawings of the limb will become available through the National Council for the Care of Cripples in South Africa, holder of the patent rights. The editorial, p. 135, reports the difficulties Dr. Allen experienced in his basic research and makes a strong appeal for financial support of university research.

AMPUTATION—MENTAL HYGIENE

401. Sanua, Victor D. (62 Dwight St., Brookline, Mass.)

Sociocultural factors in responses to stressful life situations; the behavior of aged amputees as an example. *J. Health and Human Behavior*. Spring, 1960. 1:1:17-24.

The 45 patients grouped as Jewish, "Old American," Irish, or Negro exhibited variations in reactions that were attributable to differences in family values and cultural conditioning of their respective ethnic and religious groups. All subjects were of low socioeconomic status and were undergoing active rehabilitation in six New York City hospitals. Dr. Sanua believes some of the problems in rehabilitation arise from the physician's inability to recognize the effect of sociocultural factors on behavior during stressful life situations. He outlines some of the social trends that prompted the research study, conducted while a Post-Doctoral Fellow of the Russell Sage Foundation.

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AMPUTATION—OCCUPATIONAL THERAPY

402. Shaperman, Julie Werner (1706 S. Stanley Ave., Los Angeles 19, Calif.)

Learning techniques applied to prehension. *Am. J. Occupational Ther.* Mar.-Apr., 1960. 14:2:70-74.

Studies concerned with learning and maturation theories are reviewed briefly in order to determine what value their findings have for teaching prosthesis use. Since conditioning is an important factor in children's learning, the most effective incentives for reinforcing learning patterns should be sought. Several approaches to research in the area of prehension are suggested; there is great need for a test of motor skills that could be used to evaluate performance in the child amputee.

ANATOMY

See 387.

APHASIA

See 452; p. 181.

ARTHRITIS

See 388.

ARTHRITIS—MEDICAL TREATMENT

403. Kelly, Michael (Institute of Rheumatology, East Melbourne, Australia)

Active immobilization for arthritic wrists and knees. *Arch. Phys. Med. and Rehab.* Apr., 1960. 41:4:152-157.

The author subscribes to the theory of Sir Robert Jones that active movement with fixation of the painful joint makes for good nutrition and rapid repair. Flexion deformities can be prevented, he has found, by immobilization of acutely inflamed knees and wrists in extension; the hand should be used and the leg should be walked on. Causes of deformity and muscle wasting are discussed.

BLIND

404. Wood, Maxine

Blindness; ability, not disability. New York, Public Affairs Committee, c1960. 28 p. (*Public Affairs pamph. no. 295*)

Written for the layman, this public education pamphlet is available from Public Affairs Pamphlets, 22 E. 28th St., New York 16, N.Y., or the American Foundation for the Blind, 15 W. 16th St., New York 11, N.Y., at 25¢ a copy.

See also 470.

BRAIN INJURIES—DIAGNOSIS

405. Mayman, Martin (The Menninger Foundation, Topeka, Kan.)

The characteristic psychological disturbance in some cases of brain damage with mild deficit, by Martin Mayman and Riley W. Gardner. *Bul. Menninger Clinic.* Jan., 1960. 24:1:26-36.

In persons with mild brain damage the authors have observed that the span of consciousness seems at times to contract and, concurrently, the data of consciousness seem unstable and unpredictably elusive. The "concreteness"

observed in the thinking of persons with more severe brain damage may, in milder cases, represent the patient's attempt to compensate for the disruptive effects of the primary deficit. It is believed that in every case of brain damage there may be a margin of potential achievement not used spontaneously by the patient because such attempts would entail painful efforts.

See also 450; 451; 452; 453.

CEREBRAL PALSY—SOUTH AFRICA

406. Epstein, Ben

Recent advances in cerebral palsy, with special reference to South Africa. *S. African Med. J.* Feb. 13, 1960. 34:7:136-139.

A brief discussion of the facilities available for the treatment of the cerebral palsied in South Africa, followed by a review of classification schemes, diagnosis, treatment, and educational aspects of the condition. Experimental and research work conducted in South Africa is receiving more attention. There is a serious lack of facilities for the treatment of the African cerebral palsied child.

CEREBRAL PALSY—DIAGNOSIS

407. Bobath, K. (Western Cerebral Palsy Centre, 23, Upper Wimpole St., London, W. 1, England)

The neuropathology of cerebral palsy and its importance in treatment and diagnosis. *Cerebral Palsy Bul.* Winter, 1959. 8:13-33.

Dr. Karel Bobath defines the nature of the cerebral palsy problem, the normal development of motor abilities, the causes of motor handicaps in cerebral palsy, and the value of early recognition of the condition in the infant. This lengthy article is a comprehensive review of the Bobaths' method of treatment, based on the use of "reflex-inhibiting postures" to establish more normal automatic movement patterns. 43 references and 25 illustrations.

408. Diamond, Stanley (350 Post St., San Francisco 8, Calif.)

Ocular evaluation of the cerebral palsied child. *Am. J. Ophthalmol.* Dec., 1959. 48:6:721-730.

Outlines various visual defects found, with case histories to suggest ways of overcoming the handicaps. Simple measures often may bring great benefit to the child. Accurate appraisal of visual, visuosensory, and ocular assets and handicaps by the ophthalmologist is necessary for proper diagnosis, educational planning, and rehabilitation of the cerebral palsied child.

409. Francis, Shirley J. (Moody State School for Cerebral Palsied Children, P.O. Box 402, Galveston, Tex.)

Some problems of the physical therapist in testing cerebral palsied children. *Phys. Therapy Rev.* Mar., 1960. 40:3:190-192.

Evaluation of the cerebral palsied child is difficult because of motor dysfunction, sensory disturbances, and, frequently, brain damage. Specific factors that make testing difficult for the physical therapist are discussed. The Motor Age Test appears to offer the most logical approach to evaluation of motor abilities in these children.

410. Zaner, Annette (Bird S. Coler Hosp., Welfare Island, New York 17, N.Y.)

Hearing problems in athetoid cerebral palsy; preliminary report of case findings, by Annette Zaner and Maurice H. Miller. *A.M.A. Arch. Otolaryngol.* Dec., 1959. 70:12:776-778.

A report of an investigation to determine whether there is true loss of hearing sensitivity in "athetoid deafness," and whether an audiometric configuration characteristic of the "athetoid deaf" exists. A brief review of the literature and audiometric findings in a selected group of 18 cerebral palsied patients are presented. These subjects showed a characteristic picture of bilateral, symmetrical, high frequency, sensorineural losses of hearing. Areas for further research are discussed.

See also 415.

CEREBRAL PALSY—EMPLOYMENT

See 473.

CEREBRAL PALSY—PSYCHOLOGICAL TESTS

411. McCarthy, James J. (*University of Illinois, Urbana, Ill.*)

A test for the identification of defects in language usage among young cerebral palsied children. *Cerebral Palsy Rev.* Jan.-Feb., 1960. 21:1:3-5.

A description of a test being developed by the Institute for Research on Exceptional Children, University of Illinois. Planned for the identification of primary language defects in young cerebral palsied children, the test is actually a battery of nine subtests that, collectively, will measure language usage ability in children from 3-0 to 9-0 years. Although designed specifically for use with the cerebral palsied, it should be useful with most children who are defective in language usage. The test should be available for experimental use in late 1960.

CEREBRAL PALSY—RECREATION

See 439; 457.

CHILDREN—GROWTH AND DEVELOPMENT

412. Sterling, Harold M. (*Joseph P. Kennedy, Jr., Memorial Hosp., Brighton, Mass.*)

Height and weight of children with cerebral palsy and acquired brain damage. *Arch. Phys. Med. and Rehab.* Apr., 1960. 41:4:131-135.

Height and weight data of 100 patients treated at the Illinois Children's Hospital School, Minneapolis Curative Workshop Nursery School, and the University of Minnesota were compared with those of normal children of the same age. Brain damage in the cerebral palsied children had occurred prenatally, perinatally, or in early childhood. Those with congenital or early-acquired brain damage were found to be significantly shorter and lighter than would be expected, but the theory that "growth centers" in the brains of these children have been damaged is considered a poor explanation of the findings.

CHRONIC DISEASE—ILLINOIS

413. Institute of Medicine of Chicago

Summary of a comprehensive community plan for meeting the problems of chronic illness, (developed by) The

Central Service for the Chronically Ill of the. . . Chicago, The Institute, 1959. 78 p.

Reprinted from: *Proc., Institute of Med. of Chicago.* May 15, 1959. 22:9.

The conclusions and recommendations offered in the comprehensive community plan for the Chicago area are the result of 15 years of exhaustive study and experience. Papers presented at the meeting include: Introductory remarks, Franklin C. McLean.—The problem of chronic illness in Chicago, Henry L. Schmitz.—The comprehensive plan; what it is and how it can be used, Edna Nicholson.—Research and professional education, Franklin C. McLean.—The individual and his family in the prevention and control of chronic illness and in the care and rehabilitation of the patient, Mrs. W. Denison Dunning.—Coordination in the planning and use of community services, Alexander Ropchan.—The Central Service for the Chronically Ill; its history and services, Henry T. Ricketts.—Long term care; some general principles, John A. Rogers.—Care of patients at home, Albert VanderKloot.—Care in institutional facilities, Ford K. Hick.—What is a good nursing home? Margaret B. Klein.—Safeguarding the quality of care, Edward A. Piszczek.—Cost of services and methods of financing, Lee Strohl.—Summary of the recommendations, Edna Nicholson.—Services necessary to meet the problems of chronic illness.

Available from Institute of Medicine of Chicago, 86 E. Randolph St., Chicago 1, Ill., at \$1.00 a copy.

CHRONIC DISEASE—PROGRAMS

414. Cosin, L. Z. (*Cowley Road Hosp., Oxford, England*)

Problems of social competence in the disabled patient, by L. Z. Cosin and Jane Ford. *Occupational Therapy.* Mar., 1960. 23:3:19-26.

An account of experiences in the Oxford Geriatric Unit by the clinical director and the occupational therapist. Elderly patients can receive 24-hour nursing service, convalescent and rehabilitation care, or day hospital care, depending upon their medical, psychological, and social needs. Needs of the young permanently disabled person are also provided for in another small unit. Continual reassessment of the patient's social competence is made with the objective of returning him to as independent a position in the community as he is capable of maintaining.

See also 395; 425.

EPILEPSY

415. Illingworth, R. S. (*Dept. of Child Health, Univ. of Sheffield, Sheffield, England*)

Convulsions in mentally retarded children with or without cerebral palsy; their frequency and age incidence. *J. Mental Deficiency Res.* Dec., 1959. 3:2:88-93.

In a consecutive group of 816 mentally retarded children studied at Children's Hospital, Sheffield, England, 87 children with mongolism had no record of convulsions. Of the remaining 729 (285 with cerebral palsy; 444, without) incidence of convulsions in the two groups was 37.5 percent and 31.3 percent, respectively. Groups were further subdivided according to degree of retardation. Prematurity appeared to be a more important factor in relation to convulsions in the severely retarded group with

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cerebral palsy than in the severely retarded without cerebral palsy. Age at onset for both those with and without cerebral palsy was similar. More than half of each group had the first convulsion before the first birthday. Comparison with data from other studies is made.

HAND

416. Berberian, Albert J. (*St. Luke's Hosp., New Bedford, Mass.*)

Provisions for a hand clinic in a general hospital. *Phys. Therapy Rev.* Mar., 1960. 40:3:193-195.

A Hand Service was organized at Boston City Hospital in 1947. Subsequently, a Hand Clinic was established in the outpatient section of the Department of Physical Medicine and Rehabilitation. The clinic provides educational training for the hospital staff. Responsibilities of the physical therapist who acts as co-ordinator of services are discussed, as well as the types of hand conditions requiring physical therapy.

HEART DISEASE

417. Becker, Marvin C. (*Beth Israel Hosp., Newark, N.J.*)

Social aspects of cardiovascular rehabilitation, by Marvin C. Becker, Wayne Vasey, and Jerome G. Kaufman. *Circulation.* Apr., 1960. 21:4:546-557.

Community resources for management of the physical, emotional, economic, and social problems occasioned by heart disease should be known to the physician and utilized fully. The physician, members of ancillary professions working in the rehabilitation field, the rehabilitation center and other facilities of voluntary agencies, and state and federal resources all offer social help for the cardiac patient. Expansion of rehabilitation facilities and education of the public, as well as revision of the legal aspects of the entire subject, are future goals in cardiac rehabilitation. (For Dr. Becker's discussion of employment aspects of cardiac disability, see *Rehab. Lit.*, May, 1960, #349.)

418. Rusk, Howard A. (*400 E. 34th St., New York 16, N.Y.*)

Rehabilitation in congestive heart failure, by Howard A. Rusk and Menard M. Gertler. *Circulation.* Mar., 1960. 21:3 (Part I):444-447.

Rehabilitation calls for meticulous diagnosis, evaluation of the physical, social, vocational, and psychological status, and individualized management of treatment and daily living activities. Tables listing energy costs of various activities are included; these are helpful to the physician in evaluating the patient's capacity for work and everyday activities. 25 references. This article is one of a group of four from a symposium on congestive heart failure appearing in this issue of *Circulation*.

HEART DISEASE (CONGENITAL)—INSTITUTIONS

419. American Heart Association (*44 E. 23rd St., New York 10, N.Y.*)

Standards for centers caring for patients with congenital cardiac defects; report of the Committee on Congenital Heart Defects. . . . *Circulation.* Apr., 1960. 21:4: 615-617.

Clinic standards, staff qualifications, diagnostic facilities and services that should be available, and the basic requirements in surgical care of patients are outlined. Aftercare and follow-up visits in co-operation with the referring physician are essential. The Committee recommends careful consideration of the need for such specialized services in a city or area before establishing a center. This report supplements *Recommended Standards for Cardiovascular Clinics*, revised and issued by AHA in 1955.

HEART DISEASE (CONGENITAL)—PARENT EDUCATION

420. American Heart Association

If your child has a congenital heart defect. New York, The Assn., c1960. 47 p. diag.

A booklet to provide general background information on congenital heart defects in children, mainly of the type that may be completely or partly corrected by surgery. Major sources of help in obtaining medical and surgical care for the child, how to prepare him for hospitalization, information on diagnostic tests and surgical procedures, and caring for the child convalescing at home are discussed. Diagrams and descriptions of the normal heart and several congenital heart defects are included.

Available from the American Heart Association, 44 E. 23rd St., New York 10, N.Y., or from your local heart association.

HEMIPLEGIA—DIAGNOSIS

See 451.

HEMIPLEGIA—PROGRAMS

421. Cooney, Donald V. (*Jewish Chronic Disease Hosp., 86 E. 49th St., Brooklyn 3, N.Y.*)

Home care rehabilitation program for the hemiplegic. *Am. Arch. Rehab. Therapy.* Mar., 1960. 8:1:1-5.

Dr. Cooney, director of the Home Care Program at the Jewish Chronic Disease Hospital, Brooklyn, reports the design of a five-year research project to evaluate the social, physical, and psychological gains to hemiplegic patients receiving, at home, adaptations of services normally available only in a hospital. The program of pre-hospitalization preventive maintenance will work with experimental and control groups; the effects of instituting such a program comparatively early in the treatment of hemiplegics will be evaluated. Dr. Joseph H. Rogoff, Director of Physical Medicine and Rehabilitation at the Hospital, is the project's principal investigator. Dr. Cooney was formerly Director of Professional Services at the Leech Farm VA Hospital, Pittsburgh.

HIP

422. Benjamin Rose Hospital, Cleveland

Multidisciplinary studies of illness in aged persons; III. Prognostic indices in fractures of the hip, by the Staff of the. . . . *J. Chronic Diseases.* Apr., 1960. 11:4: 445-455.

Another of the long-term studies on the course of chronic illnesses being conducted at Benjamin Rose Hospital under the direction of Drs. Sidney Katz and Austin B. Chinn, principal investigators. Certain nursing,

physical, and psychological characteristics of fracture patients were prognostically related to mortality and to deterioration in activities of daily living, in walking, and in nature of residence. For earlier reports, see *Rehab. Lit.*, June, 1958, #654, and Mar., 1959, #257.

HOME ECONOMICS

423. Danish National Association for Infantile Paralysis. Testing and Observation Institute (*Tuborgvej 5, Hellerup, Denmark*)

General lines in designs of dwellings for handicapped confined to wheelchairs; Part II, by Vibeke Leschly, Alice & Børge Kjaer. Hellerup, Denmark, The Institute, 1960. 66 p. illus. (*Communications from the . . . 1960. no. 6*)

This paper, one of two dealing with design and adaptations for dwellings for the handicapped, discusses furnishing and layout of kitchens for the homemaker who uses a wheel chair. Part I, published separately under the same title, gives general principles to be considered in planning homes for the handicapped. It was published in 1959 as No. 3 in the series of *Communications*. All reports are in English and available on request to the Association (see *Rehab. Lit.*, Nov., 1959, p. 334).

HOMEBOUND—PROGRAMS

424. Montero, Jose C. (*Miss Rosenberg, 1585 Fifth Ave., San Francisco 22, Calif.*)

Functional restoration of the patient at home, by Jose C. Montero and Dorothy Rosenberg. *J. Am. Med. Assn.* Apr. 23, 1960. 172:17:1897-1901.

Home needs of convalescent patients classified by type of disability are discussed. Home evaluation and modification, assistive devices, and work-simplification devices can aid in the performance of functional living activities. Many of the technics of physical medicine and rehabilitation can be utilized by the family physician to prevent both mental and physical deterioration in the patient living at home. Community resources are available to assist the physician in carrying out a functional improvement program.

See also 421.

MEDICINE (INDUSTRIAL)

425. Mancuso, Thomas F. (*Ohio State Dept. of Health, State Office Bldg., Columbus 15, Ohio*)

The relationship of the occupational environment to chronic disease. *Indust. Med. and Surg.* Apr., 1960. 29:4:169-172.

Long-term studies of industrial groups exposed to different chemicals and occupations would be an aid in the identification of occupational diseases. Many resources could provide data helpful in recognizing the chronic diseases resulting from occupational exposure. Such information would also be useful in the placement of workers with chronic diseases and in litigation under the workmen's compensation laws. Co-ordination of effort among community resources and industrial medical departments is needed if progress is to be made in the field of industrial health.

MENTAL DEFECTIVES—BIBLIOGRAPHY

426. Whitney, E. Arthur (*Elwyn Training School, Elwyn, Pa.*)

Mental deficiency, 1959. *Am. J. Mental Deficiency.* Mar., 1960. 64:5:807-811.

Dr. Whitney in his annual review in the *Journal* cites 17 research studies, papers, and conference proceedings. Educational methods, drug therapy, childhood schizophrenia, behavioral disorders, and psychological and neurological aspects of mental deficiency were among the subjects covered.

MENTAL DEFECTIVES—INSTITUTIONS—GREAT BRITAIN

427. Tizard, J. (*Maudsley Hospital, London, England*)

Residential care of mentally handicapped children. *Brit. Med. J.* Apr. 2, 1960. 5178:1041-1046.

The report is part of a three-year research project on the psychological and educational problems of imbecile children undertaken by Dr. Tizard and his staff. For the experimental unit, staffing ratios and the methods of child care usually employed in residential nurseries for preschool children of normal intelligence were utilized. One year's experience indicates that it is desirable and possible to bring up imbecile children in small units where they can receive more individual attention than they are likely to receive in large institutions. Particularly impressive have been the changes in social and emotional development, as well as in physical health.

MENTAL DEFECTIVES—MENTAL HYGIENE

428. Peck, John R.

A study of the relationship between the attitudes and behavior of parents and that of their mentally defective child, by John R. Peck and Will Beth Stephens. *Am. J. Mental Deficiency.* Mar., 1960. 64:5:839-844.

In same issue: A study of the adjustment of parents and siblings of institutionalized and noninstitutionalized retarded children, Bettye M. Caldwell and Samuel B. Guze, p. 845-861.—A second survey of the effects of a subnormal child on the family unit, Fred J. Schonell and Meg Rorke, p. 862-868.

A report of an experimental study to obtain an objective measure of the relationship between the attitudes and behavior of parents of 10 mentally defective boys and girls toward their children and the attitudes and behavior of the individual children. The form of case study outlined here could be used by persons not trained in clinical diagnosis and would be valuable in planning, counseling, therapy, and education. 29 references.

Mrs. Caldwell (4940 Audubon Ave., St. Louis 10, Mo.) and Dr. Guze report in detail on an investigation of the reactions of mothers and siblings of two groups of retarded children, those living at home and those institutionalized. Analysis of the data failed to show any striking differences between either the mothers or the siblings in the two groups. Almost without exception, siblings had adapted to the family decision regarding the mentally retarded child.

Dr. Schonell (*Univ. of Queensland, Brisbane, Queens., Australia*) and Miss Rorke discuss findings of a survey of 50 families whose subnormal children had attended day

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classes in a special training center in Brisbane for six months or more. The help that parents received and the obviously improved adjustment of the children resulted in decreased tension within the family and aided parents in a calm acceptance of the problems and responsibilities of rearing a mentally retarded child.

MENTAL DEFECTIVES— PSYCHOLOGICAL TESTS

429. Barnett, Charles D. (*State Colony and Training School, Pineville, La.*)

Learning in familial and brain-injured defectives, by Charles D. Barnett, Norman R. Ellis, and Margaret W. Pryer. *Am. J. Mental Deficiency*. Mar., 1960. 64:5:894-901.

Although organic cases with gross physical signs were excluded from the study and MA differences taken into account, significant differences in favor of the familials were found on two of the learning tasks. The authors suggest that any general assumption that organics do not learn as readily as familials, or that they necessarily require different teaching methods, must be qualified. Findings of earlier studies are considered; a brief survey of representative literature in this area is made.

430. Johnson, G. Orville (805 S. Crouse Ave., Syracuse 10, N.Y.)

An evaluation of behavioral changes in trainable mentally deficient children, by G. Orville Johnson, Rudolph J. Capobianco, and Kathryn A. Blake. *Am. J. Mental Deficiency*. Mar., 1960. 64:5:881-893.

A report on the Research Project on Severely Retarded Children conducted at Syracuse University under the New York State Mental Health Commission and its successor, the New York State Interdepartmental Health Resources Board. This paper discusses results of an evaluation of selected psychometric tests used. Growth or changes of behavior in children over a two-year period were assessed. Tentative conclusions regarding the effectiveness of day class training, as presently constituted, for trainable mentally retarded children are discussed. 32 references.

431. Warren, Sue Allen (*Oregon Fairview Home, 2250 Strong Rd., Salem, Ore.*)

Suitability of the Columbia Mental Maturity Scale for mentally retarded institutionalized females, by Sue Allen Warren and Herbert L. Collier. *Am. J. Mental Deficiency*. Mar., 1960. 64:5:916-920.

A battery of tests including the Columbia Mental Maturity Scale, the Goodenough Draw-A-Man Test, and the Wechsler Scale was administered to 49 female mentally retarded patients recently committed to an institution. Age range was from 9 to 30. Results suggested that the 1959 revision of the CMMS is applicable for obtaining IQ scores for institutionalized mentally retarded females in this age grouping.

MENTAL DEFECTIVES—SPECIAL EDUCATION

432. Actis, Donald F. (*Alleghany Ave. Elementary School, Lindenhurst, N.Y.*)

Special school facilities and equipment prove worth in stimulating mentally retarded class. . . . *N.Y. State Education*. Mar., 1960. 47:6:15, 52.

In same issue: New plea made for mandatory classes for trainable mentally retarded children, James D. Maroon. p. 16-17.

Special facilities, equipment, and supplies in the newly erected Alleghany Ave. Elementary School permit mentally retarded children whose IQ's range from 50 to 75 to learn practical skills. A completely furnished kitchen, carpentry equipment, and sewing center allow academic subjects to be integrated with practical learning.

Mr. Maroon (*Haverstraw High School, Haverstraw, N.Y.*) notes that permissive legislation allowing the establishment of classes for the "trainable" mentally retarded has failed to provide for the needs of these children and their parents. Successful experience where classes have been established should stimulate mandatory legislation.

433. Bindman, Arthur J. (*Massachusetts Dept. of Mental Health, 15 Ashburton Pl., Boston 8, Mass.*)

New programming for the mentally retarded school child in Massachusetts, by Arthur J. Bindman and Lewis B. Klebanoff. *Am. J. Mental Deficiency*. Mar., 1960. 64:5:875-880.

Parents and professional workers pressed for legislative action on special education provisions in Massachusetts. Problems of agency co-operation, community clearance of the program, and certification of school psychologists illustrate that flexibility is essential in implementing program changes. Positive results have been evident but better co-operation is needed among educational, psychosocial, and medical facilities to meet the varying problems of all school age mentally retarded children and their parents.

MENTAL DISEASE—GREAT BRITAIN

434. Clark, D. H. (*Winston House, Cambridge, England*)

Psychiatric halfway hostel; a Cambridge experiment, by D. H. Clark and L. W. Cooper. *Lancet*. Mar. 12, 1960. 7124:588-590.

An analysis of the first year's experience in operating a sheltered residence or "halfway house" for psychiatric patients capable of paid employment in the community. Schizophrenic patients between the ages of 30 and 45 who had passed the acute phase of their illness, had lived for a number of years in a mental hospital, and were capable of regular work in the community but unable to achieve an independent social life appeared to gain most from this type of service.

MENTAL DISEASE—PROGRAMS

435. Jacobs, Durand F. (*V.A. Hospital, Tomah, Wis.*)

Vocational rehabilitation of the psychiatric patient; a hospital-community problem. *Personnel and Guidance J.* Apr., 1960. 38:8:642-647.

Vocationally oriented activities and closely co-ordinated rehabilitation programs in the hospital and community have been credited for the successful rehabilitation of chronic mental patients. The counseling psychologist is responsible for integration of psychosocial and vocational rehabilitation services in the over-all hospital treatment program. Success of the technics with mental patients suggests similar services could be utilized to place persons of other handicapped groups in productive employment.

REHABILITATION LITERATURE

MONGOLISM

436. Hallenbeck, Phyllis N. (*Flowerledge School, Geneva, Ohio*)

A survey of recent research in mongolism. *Am. J. Mental Deficiency*. Mar., 1960. 64:5:827-834.

Studies and papers cited are concerned with terms used to define mongolism, the lack of consistency in diagnostic signs, behavioral differences and intellectual level, etiologic theories regarding the condition, and educational and medical aspects of treatment. 51 references.

MONGOLISM—INSTITUTIONS

437. Centerwall, Siegfried A. (*Pacific State Hospital, Pomona, Calif.*)

A study of children with mongolism reared in the home compared to those reared away from the home, by Siegfried A. Centerwall and Willard R. Centerwall. *Pediatrics*. Apr., 1960. 25:4:678-685.

Reports evaluation of two groups: those placed outside the home soon after birth, the other of children kept at home until 2½ years of age or over. Children in the latter group showed significantly better nutrition and growth and walked at a much earlier age; IQ and Social Quotient scores were also higher. Generally, the children of the institutionalized group functioned in the severely retarded range, the other group, in the moderately retarded or trainable range.

MONGOLISM—PSYCHOLOGICAL TESTS

438. Dunsdon, M. I. (*The Hospital for Sick Children, Great Ormond St., London, W.C. 1, England*)

Upper end of range of intelligence in mongolism, by M. I. Dunsdon, C. O. Carter, and R. M. C. Huntley. *Lancet*. Mar. 12, 1960. 7124:565-568.

A battery of tests, including the Terman Merrill, Stanford Binet, Vineland Social Maturity Scale, and several for basic educational achievement, was administered to 44 children. Findings are analyzed, with the conclusion drawn that mongol children need an IQ of not less than 45 and a social quotient of the order of at least 50 to profit from special education classes. Physical stigmata in relatively bright mongol children were no different from those found in children with lower IQ test scores.

MULTIPLE SCLEROSIS

See 442.

MUSIC THERAPY

439. Holser, Patricia (*Apt. 7L, 431 Burnside Ave., Los Angeles 36, Calif.*)

Music therapy in an adult cerebral palsy center, by Patricia Holser and Robert Krantz. *Am. J. Occupational Ther.* Mar.-Apr., 1960. 14:2:61-63, 93.

Group singing and rhythmic work, plus individual instruction on musical instruments that can be adapted to individual needs, constitute a music therapy program for cerebral palsied adults provided at the United Cerebral Palsy Center of Los Angeles County. Direction of the program is the responsibility of the occupational therapist and a professional musician serving as music therapist.

Activities aimed at physical improvement and recreational interest are described.

NEUROLOGY

440. Curran, Patricia Ann (*2326 Ewing St., Los Angeles 39, Calif.*)

A study toward a theory of neuromuscular education through occupational therapy. *Am. J. Occupational Ther.* Mar.-Apr., 1960. 14:2:80-87.

Rationale of the main treatment technics of the major schools of neuromuscular treatment is examined in an attempt to formulate a theory of neuromuscular education for occupational therapy. Differences in the treatment technics of Fay, Kabat, Rood, and the Bobaths are discussed. Basic concepts of neuromuscular treatment rationale are compared with basic psychological theories explaining man's behavior. It is the author's view that psychological theories could be used to advantage in the evaluation of present neuromuscular treatment theory. The article abstracts a master's thesis, University of Southern California.

441. White, Robert J. (*Mayo Clinic, Rochester, Minn.*)

Neuropathologic review of brain lesions and inherent dangers in chemopallidectomy; report of a case of bilateral pallidal destruction, by Robert J. White, Collin S. MacCarty, and Robert C. Bahn. *A.M.A. Arch. Neurology*. Jan., 1960. 2:1:12-18.

Necropsy findings in a case of bilateral pallidal destruction from a unilateral chemopallidectomy are analyzed; they clearly demonstrated the successful location and injection of the globus pallidus by one of Cooper's technics of chemopallidectomy. However, there was absence of permanent alteration in tremor and rigidity. The dangers inherent in the method of intracerebral injection of Etopalin are pointed out; the injury resulting from the injection of alcohol was characterized by coagulation necrosis and marked hemosiderosis.

See also 407.

NURSING

See 392.

NUTRITION

442. Swank, Roy L. (*Univ. of Oregon Med. School, Portland, Ore.*)

Treatment of multiple sclerosis with a low-fat diet. *J. Am. Dietetic Assn.* Apr., 1960. 36:4:322-325.

A detailed analysis of experiences with a low-fat diet used in the treatment of 121 patients over a 9½-year period. Patients in the intermediate or late phase of the disease showed less improvement on the diet but all patients experienced a reduced frequency and severity of exacerbations. Early diagnosis and treatment are necessary before serious disability develops if the patient is to benefit significantly. The diet, its adjustment to individual patients, and results observed are discussed.

OLD AGE

See 393; 414; 456.

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OLD AGE—INSTITUTIONS

443. Adams, G. F. (*Wakehurst House, Belfast City Hosp., Belfast, Ireland*)

The third phase in geriatric medicine; design and purpose of a hospital geriatric department. *Lancet*. Apr. 9, 1960. 7128:815-817.

Describes a rehabilitation unit for geriatric patients at Belfast City Hospital, the renovations and new building required in setting up the unit, and the physical layout decided upon. Floor plans are included. Experience of the unit, its staffing problems, and admission policies are discussed.

OLD AGE—MENTAL HYGIENE

444. Lewis, John A. (*1705 Gordon Ave., Charlottesville, Va.*)

Psychological needs and services for nursing home residents. *Mental Hygiene*. Apr., 1960. 44:2:185-187.

Psychological services should be used only for special problems that nursing home personnel cannot manage. By improving staff understanding of patients' psychological needs and the reactions to be expected in this age group (average, over 80), the nursing home can provide successful care for the aged. Sensible attention to dietary and medical needs, the provision of a simplified environment, and encouraging activities of interest can often reverse unpleasant mental reactions in the aged.

OLD AGE—SOCIAL SERVICE

445. Farrar, Marcella (*Benjamin Rose Institute, Cleveland, Ohio*)

Case work and group work in a home for the aged, by Marcella Farrar and Nelida Ferrari. *Soc. Work*. Apr., 1960. 5:2:58-63.

Discusses casework experiences with residents of Braeburn House, one of three small homes providing residential services for aged men and women and operated by Benjamin Rose Institute of Cleveland. Integration of casework and group work services resulted in improvement in morale and climate in the home. Individual case histories illustrate the benefits, both physical and mental, to residents.

PARALYSIS AGITANS

446. Doshay, Lewis J. (*710 W. 168th St., New York 32, N.Y.*)

The psychotherapy of paralysis agitans. *J. Am. Med. Assn.* Mar. 26, 1960. 172:13:1347-1351.

In same issue: Use of tolbutamide in paralysis agitans; preliminary report, Edwin W. Gates and Irving Hyman. p. 1351-1354.

Dr. Doshay believes the general practitioner is fully capable of providing all the psychotherapy necessary to instill optimism in the patient with paralysis agitans. Orienting the patient to the nature of the disease, sincere concern for his welfare, and reassurance given to both the patient and his family can go far in helping him to remain active. In the advanced stages of the disease, the availability of community resources for treatment and care can lessen the depression and frustrations accompanying disability.

Effects of tolbutamide on rigidity and tremor in 15 patients are reported by Dr. Gates (*625 Sixth St., Niagara Falls, N.Y.*) and Dr. Hyman. In 11 of the group considerable reduction of tremor or rigidity, or both, was observed. Improvement of speech was noted in several. Improvements were not related to hypoglycemia. In view of the consistency of results, further research is indicated.

See also 441.

PARAPLEGIA

447. Leventhal, Harvey R. (*Grace-New Haven Hospital, New Haven, Conn.*)

Birth injuries of the spinal cord. *J. Pediatrics*. Apr., 1960. 56:4:447-453.

Findings in six cases of children with birth injuries of the spinal cord are presented; the subsequent course of their development is summarized. Dr. Leventhal discusses obstetric technics and neurosurgical management of the child, problems of differential diagnosis, and the supportive treatment needed by the child who is paraplegic from birth.

PARENT EDUCATION

448. Thurston, John R. (*2620 Fairfax Ave., Eau Claire, Wis.*)

Counseling the parents of the severely handicapped. *Exceptional Children*. Mar., 1960. 26:7:351-354.

Findings from a survey of parental attitudes toward their children's handicaps (mainly of a severe neurological type) revealed areas where more effective counseling of parents was deemed necessary. Effective counseling, as viewed by expert psychologists, involves the acceptance of disability, the setting of rather long-range plans, and counseling parents about attitudes and feelings. (For a description of the survey procedure, see *Rehab. Lit.*, Sept., 1959, #729.)

POLIOMYELITIS—PSYCHOLOGICAL TESTS

449. Wendland, Leonard V. (*Rancho Los Amigos Hospital, Downey, Calif.*)

The intellectual functioning of postpoliomyelitic patients, by Leonard V. Wendland, Albert H. Urmer, and H. William Safford. *J. Clinical Psych.* Apr., 1960. 16:2:179-181.

In 93 post bulbospinal poliomyelitic patients, the relation of intelligence test scores to such variables as age at onset of the disease, sex, and length of time between onset and time of testing was considered. The finding of a significant reduction in intellectual function from pre-illness function, and the suggestion that this reduction may be due to depression caused by hospitalization, should be kept in mind when evaluating tests results of poliomyelitic patients.

PSYCHOLOGICAL TESTS

450. Levinson, Boris M. (*39-25 47th St., Sunnyside, L.I., N.Y.*)

Research note on Columbia Mental Maturity Scale (CMMS) and Revised Stanford-Binet (L) in a preschool population, by Boris M. Levinson and Zelick Block. *J. Clinical Psych.* Apr., 1960. 16:2:158-159.

A recent revision of the CMMS substituted 17 new items for former ones; order of administration of most of the other items was changed to correspond to order of difficulty. New norms were also established. The authors report results of testing 39 children in a preschool setting, using the Revised Stanford-Binet L form and the Revised CMMS. Further revision in item arrangement, administration, and scoring appears to be indicated for the CMMS.

451. MacDonald, Joanne Catherine (847 Exposition Blvd., Los Angeles 7, Calif.)

An investigation of body scheme in adults with cerebral vascular accidents. *Am. J. Occupational Ther.* Mar.-Apr., 1960. 14:2:75-79.

Describes in detail a "Test of Body Scheme" developed by the author to evaluate body scheme disturbances in adults who have suffered cerebrovascular accidents. Possible correlations of age, sex, and duration of impairment with body scheme disturbances were sought. In the population tested, body scheme disturbances were found frequently enough to suggest the advisability of routine evaluation of this function in adults with cerebrovascular accidents. This article is an abstract of a master's thesis, University of California at Los Angeles.

452. Sterne, David M. (V.A. Hospital, Vancouver, Wash.)

Use of the Ammons FRPV with the long-term chronically ill. *J. Clinical Psych.* Apr., 1960. 16:2:192-193.

Two forms of the Ammons Full Range Picture Vocabulary Test were administered to 60 male patients with long-term chronic illnesses; the Wechsler Adult Intelligence Scale was administered to 54 of the same group to test the validity of both forms of the Ammons Test. Advantages of the Ammons Test for such patients, and especially with those having expressive aphasic disorders, are considered.

453. Urmer, Albert H. (Rancho Los Amigos Hospital, Downey, Calif.)

The effect of brain damage on Raven's Progressive Matrices, by Albert H. Urmer, Ann B. Morris, and Leonard V. Wendland. *J. Clinical Psych.* Apr., 1960. 16:2:182-185.

It was hypothesized that brain-damaged patients would perform quantitatively more poorly than nonbrain-damaged persons on Raven's Progressive Matrices. Response patterns considered as qualitatively different were also expected. Results of testing a control group and a group with a diagnosis of cerebrovascular accident are compared; both quantitative and qualitative performance of the brain-damaged group was poorer than that of controls. This study confirms the sensitivity of the Progressive Matrices as a test for brain damage.

PSYCHOLOGY

454. Bice, Harry V. (221 E. State St., Trenton, N.J.)

The concept of competition in the education of the exceptional child. *Exceptional Children.* Mar., 1960. 26:7:346-349, 354.

A psychologist grants that competition has a place in education but points out that it should not mean the same to all children and all parents. Individual differ-

ences in learning ability in the gifted, the mentally retarded, and the brain-damaged child require changes in attitudes toward the goals expected of children with handicaps or special abilities. Only when educators recognize individual differences and needs will school organization be adapted to meet the needs of all children.

455. Shontz, Franklin C. (Highland View Hosp., Harvard Rd., Cleveland 22, Ohio)

Chronic physical illness as threat, by Franklin C. Shontz, Stephen L. Fink, and Charles E. Hallenbeck. *Arch. Phys. Med. and Rehab.* Apr., 1960. 41:4:143-148.

Empirical evidence of the fact that personal values of the physically disabled are not always concerned with "getting well" should cause physicians to take a new look at rehabilitation technics. Although the disabled tend to be somewhat more concerned with physical functioning than do healthy persons, their over-all values are much the same as those of the nondisabled and are not as subject to change as one might like to believe. Research shows that the basic balance of personal values between the psychological and physical factors is only slightly disturbed by chronic physical illness.

See also 402.

RECREATION

456. Thompson, Morton

Starting a recreation program in institutions for the ill or handicapped aged. New York, Natl. Recreation Assn., c1960. 28 p.

Administrators of nursing homes, hospitals, and homes for the aged will find these discussions of the organization and development of recreation programs for the aged of value. Chapters deal with such practical aspects as co-operative plans for small homes, planning activities suited to the needs and limitations of older persons, and equipment and facilities. Qualifications of professional recreational personnel and the use of volunteers in recreation programs are defined. The recreation worker lacking experience in this area could profit from the information concerning characteristics of the aged and ill and their recreational needs.

Available from National Recreation Assn., 8 W. Eighth St., New York 11, N.Y., at \$1.25 a copy.

RECREATION—EQUIPMENT

457. Thompson, Morton T. (Natl. Recreation Assn., 8 W. Eighth St., New York 11, N.Y.)

Physical disabilities; playground equipment for the handicapped. *Recreation for the Ill and Handicapped.* Apr., 1960. 4:2:10-11.

Dr. Thompson, a recent addition to the staff of the National Recreation Association's Hospital Consulting Service, has submitted information on plans for a special playground for the Cerebral Palsy Association of Roosevelt, Long Island, N.Y. Also included here is a description of 20 active games for the aged, ill, and handicapped approved by the Recreational Research Institute (258 Broadway, New York, N.Y.). List prices are quoted; all items are available from the Institute.

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RECREATION—PERSONNEL

458. Miller, Norman P. (*Univ. of California, Los Angeles, Calif.*)

Concepts on the preparation of professional personnel for recreation rehabilitation. *Recreation for the Ill and Handicapped*. Apr., 1960. 4:2:8-9, 14, 17.

The addition of a rehabilitation center to the University of California's medical center at Los Angeles has sparked interest in the preparation of personnel to provide therapeutic services. Recreation therapy is conceived as a separate and specific therapeutic medium. Preparation should consist of a common core of undergraduate educational experiences for all therapies, followed by specialization at the graduate level with clinical training in specific areas. Four major steps in curriculum planning are outlined.

REHABILITATION—GERMANY

See 390.

REHABILITATION—ADMINISTRATION

459. Blank, H. Robert (62 Waller Ave., White Plains, N.Y.)

The multidisciplinary treatment and research team; some practical and theoretical considerations. *New Outlook for the Blind*. Apr., 1960. 54:4:115-118.

Three model plans for the organization and functioning of treatment and research teams involved in services to the physically handicapped are charted and examined. Dr. Blank points out the major barriers to optimal multidisciplinary collaboration. Professional conflicts, having their basis in psychological and economic difficulties, prevent productive functioning as a team member. Efficient intake services can help to minimize waste of professional and financial resources.

REHABILITATION—PERSONNEL

460. Norton, Joseph L. (*Alfred University, Box 844, Alfred, N.Y.*)

Counseling the disabled about work in rehabilitation. *Personnel and Guidance J.* Apr., 1960. 38:8:653-655.

Often the handicapped adolescent, in choosing a possible career, is motivated by the belief that he is equipped through his own disability to help others with the same problems. Such a person poses problems for the vocational counselor. Dr. Norton points out the fallacy of certain generalizations in this area. The counselor should be discouraged from steering the disabled into rehabilitation work. Further studies on the question are suggested, along with specific types of data that would be helpful in resolving the issue.

See also 394; 468; p. 174.

REHABILITATION—PROGRAMS

461. Burney, Leroy E. (*U.S. Public Health Service, Washington 25, D.C.*)

The challenge of disability. *Public Health Rep.*, Apr., 1960. 75:4:295-297, 299.

In same issue: The physician and rehabilitation, T. Nishigaya. p. 298.

Public health can best foster attitudes of prevention. Changes in patterns of illness necessitate new and additional services, many of which are unavailable outside the hospital. Better organization of community services, earlier application of preventive methods in the care of all patients, and greater co-operation among those in public health, medical, and rehabilitation fields are needed to reduce the social and economic consequences of disability.

Dr. Nishigaya (764 Kapahulu St., Honolulu 16, Hawaii) sees rehabilitation as every physician's business and shows the need for treatment of the "whole" person. Medical care is not complete until the patient has been trained to live and work with what potential remains. Both papers were presented at the Governor's Institute on Rehabilitation, Honolulu, in January.

REHABILITATION— STUDY UNITS AND COURSES

See 391; 392; p. 174.

REHABILITATION CENTERS— ADMINISTRATION

462. Roberts, Dean W. (2023 W. Ogden Ave., Chicago 12, Ill.)

Paying for rehabilitation, by Dean W. Roberts and Basil J. F. Mott. *J. Am. Med. Assn.* Apr. 23, 1960. 172:17: 1934-1937.

The sixth of a series of articles authorized for publication by the American Medical Association's Committee on Rehabilitation. Responsibilities of the medical profession in the development and use of rehabilitation centers are defined. The private physician should also be aware of community resources available for helping the patient with limited means secure the needed services of the rehabilitation center. Costs of financing rehabilitation services have been studied extensively; some of the findings are reported here. (For previous articles in the series, see *Rehab. Lit.*, Dec., 1959, #941, Jan., Feb., and March, 1960, #53, 119, and 208.)

See also 396; p. 174.

SPECIAL EDUCATION

See 454.

SPECIAL EDUCATION—EUROPE

463. Taylor, Wallace W. (*New York State University College for Teachers, Albany, N.Y.*)

Rehabilitation of young adults in Western Europe, by Wallace W. Taylor and Isabelle Wagner Taylor. *Rehab. Record*. Mar.-Apr., 1960. 1:2:3-7.

Another in a series of articles based on the authors' two-year study of special education in Western Europe. Described are training opportunities, types of facilities providing training, and how training is financed. For other articles based on the study, see *Rehab. Lit.*, Apr., 1960, #304, which lists previous articles annotated since July, 1959, as well as advance notice of the authors' forthcoming book.

SPECIAL EDUCATION—U.S.S.R.

464. Tenny, John W. (*Wayne State Univ., Detroit 2, Mich.*)

Special education in the Soviet Union. *Exceptional Children*. Feb., 1960. 26:6:296-304.

During a five-week tour of Russia sponsored by the Comparative Education Society of the United States, Dr. Tenny observed special education facilities and provisions in the Soviet Union. Social and political influences on education, the level of general education, and unique aspects of special education provisions are discussed. Segregation of the atypical child is an almost universal practice in Russia and continues into adult life. Suggestions for improving special education programs in America are offered in conclusion. Similar articles by Dr. Tenny and other educators, members of the tour, were annotated in *Rehab. Lit.*, Mar., 1959, #274 and Dec., 1959, #911.

SPECIAL EDUCATION—PERSONNEL

465. Willenberg, Ernest P. (*Calif. State Dept. of Education, Sacramento 14, Calif.*)

Regional planning for the preparation of teachers for handicapped children in the Western states. *Exceptional Children*. Feb., 1960. 26:6:322-326.

Staffing needs of 13 Western states were considered in a recent survey of handicapped children by the Western Interstate Commission on Higher Education. Such estimates become obsolete, however, in a very short time. The author points out, through a 10-year projection of the needs for special education personnel in California, that many factors must be considered in long-range regional planning if it is to be effective. Estimated increases in special class enrollments, teacher drop-outs requiring replacements, differences in organization and instruction to meet the needs of varying administrative units and the physically handicapped children served—all affect recruitment and training plans.

SPECIAL EDUCATION—PROGRAMS

466. Blessing, Kenneth R. (*637 Orchard Dr., Madison, Wis.*)

The function and role of the modern state department in providing special educational services for exceptional youth. *Exceptional Children*. Apr., 1960. 26:8:395-400, 408.

Defines the modern day functions of state department supervision, the competencies needed by state consultants as set forth by the U.S. Office of Education, weaknesses at both the state and local level that hamper co-operative planning and co-ordination of services, and ways of improving democratic leadership in the administration of special education services.

SPECIAL EDUCATION— STUDY UNITS AND COURSES

467. Rosenberg, A. (*Hospital for Joint Diseases, 1919 Madison Ave., New York 35, N.Y.*)

Hospital teaches teachers how to help the disabled child. *Hospitals*. Apr. 1, 1960. 34:7:36-37, 97.

A 15-week credit course, approved by the New York

City Board of Education and conducted at the Hospital for Joint Diseases, affords teachers an opportunity to study many aspects of the health, welfare, and education of physically handicapped children. Organization and curriculum of the course are discussed briefly. (See *Rehab. Lit.*, June, 1959, p. 192.)

SPEECH CORRECTION

468. Johnson, Wendell (*Univ. of Iowa, Iowa City, Iowa*)

The role of communication in human behavior; speech and hearing problems. *Rehab. Record*. Mar.-Apr., 1960. 1:2:31-35.

With an estimated three to eight million persons in the United States affected by serious communication disorders, the need for additional speech clinicians and audiologists is staggering. Dr. Johnson lists briefly the various types of speech and hearing problems encountered in both children and adults, the services presently available, and the need for expanding training facilities. More detailed information is available in a recently published special report of the American Speech and Hearing Association (see *Rehab. Lit.*, Nov., 1959, #868).

See also 389; p. 181.

SPINA BIFIDA—STATISTICS

469. Rudder, B. de (*University Children's Clinic, Ludwig-Rehn-Str. 14, Frankfurt, Germany*)

The growing incidence of severe congenital abnormalities. *German Med. Month.* Mar., 1960. 5:3:84-85.

Statistics on the incidence of congenital spinal malformations (meningocele, myelocele, and meningo-myelocele) among 33,000 infants and children admitted to the University Children's Hospital in Frankfurt, Germany, show an increase over the incidence rates between 1936 and 1939. No external factor has been found to account for this increase. Since 1951, 78 cases of severe deformities of the vertebral canal have been seen, 53 of which have been in girls. This repeated the predominance of congenital abnormalities in females seen in earlier groups.

SPORTS

470. Berthe, Philippe

Introduction to the practice of skiing as a means of functional re-education and training, by Philippe Berthe and Rene Guicharnaud. *Rehab. Bul.*, World Veterans Fed. (1960). 16:5-8.

In same issue: Teaching blind beginners how to ski, Georges Deschamps. p. 8-10.

First of a series of articles on "Sports and the Disabled" that will appear in *Rehabilitation Bulletin*, both are part of a report of a meeting of experts held in 1959 by the French Association of Sports for the Disabled. In the first article, technics for general conditioning and skiing by persons with various types of amputations are discussed. Mr. Deschamps, a physical education teacher at the Institute for the Young Blind, Saint-Mande, France, reports a method and sequence of instruction for teaching the blind to ski. A code for positions, attitudes, directions, and the classic movements of the French method for skiing has been devised in Braille.

VOCATIONAL GUIDANCE

471. Rosenberg, Bernard (400 First Ave., New York 10, N.Y.)

A structured pre-vocational program, by Bernard Rosenberg and Thelma Wellerson. *Am. J. Occupational Ther.* Mar.-Apr., 1960. 14:2:57-60, 106.

Basic differences between a vocational evaluation and a prevocational program as practiced at the Institute for the Crippled and Disabled, New York City, are discussed. The prevocational program, primarily concerned with developing and improving the client's work habits, work tolerance, and productive speed, is medically oriented and conducted in the occupational therapy unit of the medical service. Technics of both programs are described.

472. Wegg, Lillian S. (801 Beechwood Dr., Daly City, Calif.)

The essentials of work evaluation. *Am. J. Occupational Ther.* Mar.-Apr., 1960. 14:2:65-69, 79.

Eleanor Clarke Slagle Lecture.

Criteria for work evaluation tests and technics for their administration, as developed at the May T. Morrison Center for Rehabilitation, San Francisco, are discussed in some detail. Responsibilities of the person administering the test and the necessity for comprehensive reporting of tests results are considered. The article should be a valuable addition to the literature in this area.

473. Yue, Shyh-Jong (Presbyterian Hosp., 622 W. 168th St., New York 32, N.Y.)

Medical and vocational evaluation of young adult cerebral palsied; experience and followup, 157 cases, by Shyh-Jong Yue and Martin G. Moed. *Arch. Phys. Med. and Rehab.* Apr., 1960. 41:4:136-142.

Data are presented on 157 young adult patients who completed both medical and vocational evaluation in the Cerebral Palsy Work Classification and Evaluation Project at the Institute for the Crippled and Disabled, New York City. Actual vocational success of 126 patients included

in the follow-up study is assessed. The data also provide opportunity for judging the respective value of individual tests in predicting vocational success.

See also 394; 460.

WHEEL CHAIRS

474. Brent, Sidney Z. (V.A. Hospital, Bronx 68, N.Y.)

Basic considerations in the prescribing of wheel chairs. *Am. J. Phys. Med.* Apr., 1960. 39:2:47-50.

Modern concepts of rehabilitation recognize the importance of individualized prescription of wheel chairs, especially for the more severely disabled patient. Discussed are special types of wheel chairs and accessories suitable for use by patients with spinal cord injuries, cerebrovascular accidents, bilateral amputation of lower extremities, and extensive arthritis. The prescription wheel chair should be ordered only when the patient has reached the plateau in recovery; the physician or trained rehabilitation specialist should be responsible for its selection. Standard and special models are illustrated.

(Continued from page 190)

tal. Only three serious injuries occurred—one a cable burn and two fractures, one possibly spontaneous. We had no accidents from electric shock or therapeutic technics. Our main fault appears to be inadequate supervision of patients. It is unfortunate that we must rely on the patient's sensation when being given short-wave diathermy. Our findings show how unreliable this can be.

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National and International Meetings

July

International Conference on the Scientific Study of Mental Deficiency, July 24-29. London, England. Mr. Harvey A. Stevens, Chairman, 301 Troy Dr., Madison 4, Wis.

International Congress on Occupational Health, July 25-29. Waldorf Astoria, New York. Dr. Leo Wade, Chairman, 15 W. 51st St., New York, N. Y.

August

American Congress of Physical Medicine and Rehabilitation, August 21-26. Mayflower Hotel, Washington, D.C. Mrs. Dorothea C. Augustin, Exec. Secretary, 30 N. Michigan Ave., Chicago 2, Ill.

Gerontological Society, August 7-12. Mark Hopkins Hotel, San Francisco. Mrs. Marjorie Adler, Admin. Secretary, 660 S. Kingshighway Blvd., St. Louis 10, Mo.

International Congress of Physical Medicine, August 21-26. Mayflower Hotel, Wash-

ington, D.C. Dr. W. J. Zeiter, 2020 E. 93rd St., Cleveland, Ohio.

World Congress of the International Society for the Welfare of Cripples, August 29-September 2. Waldorf Astoria, New York. Mr. Donald V. Wilson, Secretary-General, 701 First Ave., New York 17, N.Y.

September

American Orthotics and Prosthetics Association, September 2-6. Waldorf Astoria, New York. For information, write to the Association, 919 18th St., N.W., Washington 6, D.C.

International Society of Orthopaedic Surgery and Traumatology. Eighth Congress. September 4-9. New York City. Dr. Lee R. Straub, Secretary, 535 E. 70th St., New York, N.Y.

October

American Academy for Cerebral Palsy, October 5-8. Penn-Sheraton Hotel, Pittsburgh. Dr. Joseph D. Russ, Exec. Secre-

tary, 1520 Louisiana Ave., New Orleans 15, La.

American Academy of Pediatrics, October 17-20. Palmer House, Chicago. Dr. E. H. Christopherson, Exec. Director, 1801 Hinman Ave., Evanston, Ill.

American Nursing Home Association, October 18-21. Mayflower Hotel, Washington, D.C. For information, write the Association, 1346 Connecticut Ave., N.W., Washington, D.C.

American Public Health Association. 88th Annual Meeting, October 31-November 4. San Francisco. Dr. Berwyn F. Mattison, Exec. Director, 1790 Broadway, New York 19, N.Y.

November

American Occupational Therapy Association, November 13-17. Statler Hilton Hotel, Los Angeles. Miss Marjorie Fish, Exec. Director, 250 W. 57th St., New York 19, N.Y.

Dr. Herman M. Jahr **Comments on**

Medical Education and Mental Retardation

"**T**HOUGH mental retardation is not a popular subject today, the [medical] student must be impressed with the importance of the condition as a challenging medical problem with many social and economic implications which exert their impacts not only on the family itself, but frequently on the community as a whole. He must be impressed with the urgency of early diagnosis, the methodology involved in the evaluation of the individual patient, and the finesse of interpreting the information to the parents. It can be done without the blessings of curriculum committees. It should be done at the time the student is in the process of formulating his philosophy of medicine. It is sure to reflect itself later, in the quality of service to the families under his care."—From *"The Step-Child of Our Undergraduate Curriculum: Mental Retardation,"* by Herman M. Jahr, M.D., p. 359, in *J. Med. Education*, April, 1960.

Dental Care of Aged and Chronically Ill Discussed At 1959 APHA Conference

DENTAL CARE of the aged and chronically ill was discussed in several papers presented at the 1959 conference of the APHA. Excerpted below are some observations made by the participants.

Some 5½ million noninstitutionalized persons have dental handicaps.

No single community offers a coordinated dental care program for the chronically ill.

Community dental activities would benefit from being part of existing evaluation and diagnostic clinics. Financial aid could be obtained through existing federal aid agreements, private sources, state health and welfare funds, and nonprofit insurance companies. General hospitals and nursing homes should provide dental services badly needed by geriatric or long-term patients.

The few organized home care programs use dental clinics or portable equipment. Field trial is being conducted of a portable unit with motor and arm, storage space, and drawers, which operates on house current.

Home dental care programs should use lightweight equipment, better operating lights and positioning devices, a combined aspirator and air compressor, and separate

units for surgical, prosthetic, operative, or periodontal treatment. A single easy-to-handle case should be used.

The need for dental care of the handicapped should be stressed in workshops for nurses, physicians, and parents, since the need of such care is not recognized or does not receive the interest it warrants. The disabled person requiring an anesthetic should be given one only in a hospital.

A project begun in 1957 by Community Studies, Inc., and the University of Kansas City School of Dentistry pointed up the need of orienting community and professional leaders to the value of dental health in the aged and chronically ill. The project has established a training program for senior dental and dental hygiene students. In view of the widespread disregard of oral hygiene, dental hygienists should give frequent prophylaxis, dental health education, and screening. Three out of 10 in the project's sample of nursing home residents refused treatment. Seventy-eight percent were transported to a clinic, 7 percent used an ambulance, and 15 percent had home treatment. Sixty percent of 964 homebound persons selected were available for examination. Few refused treatment. Nine percent were treated at home, 5 percent came by ambulance, and a few used their own means. The project examined a total of 2,210 with an average age of 70, 60 percent of whom needed and could benefit from treatment. Cost and lack of transportation were the major blocks to use of dental services.

U.S. Public Health Creates Nursing Home Services Section

A NEWLY formed Nursing Home Services Section of the U.S. Public Health Service's Chronic Disease Program will offer consultation on clinical services, administrative management, and licensing of nursing homes and homes for the aged. Responsibilities will include: Study and analysis of needs primarily related to services offered in such homes; development of guides on operation and state licensure; and rules and regulations for this type of home.

Inquiries may be directed to the chief, Dr. Bruce Underwood (*Nursing Home Services Sec., Chronic Disease Program, Div. of Special Health Services, Bur. of State Services, U.S. Public Health Service, Washington 25, D.C.*). Staff members are: Mr. Kenneth R. Nelson, Jr., consultant in administrative management of medical care facilities; Mrs. Frances S. Wolford,

nursing consultant; and Mrs. Charlotte Enterline, secretary.

Bernard Baruch to Speak At Physical Medicine Congress in August

BERNARD M. BARUCH, internationally known financier, philanthropist, and advisor to Presidents, has accepted an invitation to speak at the Third International Congress of the International Federation of Physical Medicine, meeting in Minneapolis, Minn., August 21-26. Dr. Frank H. Krusen, president of the Congress, states that delegates from 27 countries will attend the sessions, which will center on clinical, remedial, preventive, and educational aspects of physical medicine and rehabilitation. Mr. Baruch will celebrate his ninetieth birthday two days before the Congress convenes.

National Wheelchair Games Held in June

THE FOURTH National Wheelchair Games were held June 10-12 at the VA Hospital at Kingsbridge Rd., Bronx, N.Y., and Bulova Park, Jackson Heights, N.Y. Sponsored by the Joseph Bulova School of Watchmaking (40-24 62nd St., Woodside 77, N.Y.) in co-operation with the Paralyzed Veterans of America and the National Paraplegia Foundation, the Games included racing, field, and swimming events. Net proceeds will be used to aid in sending a disabled team, selected from the Games, to represent the United States at the World Wheelchair Games to be held in Rome, Italy, on September 15.

British to Publish Reference Book on Equipment for Disabled

A LOOSE-LEAF reference book on *Equipment for the Disabled*, sponsored by the National Fund for Poliomyelitis Research (England), is being compiled for use by all those engaged in the management of the disabled, irrespective of the origin of disability. The first edition may be available by the end of 1960. Dr. Margaret Agerholm, Disabled Living Research Unit, Nuffield Orthopaedic Centre, Headington, Oxford, is the medical editor. The collaboration of all with experience in the field is being sought so that the volume will be comprehensive. Ideas and information from physiotherapists in England have been requested.

EVENTS AND COMMENTS

New Reference Lists Now Available from NSCCA

THE LIBRARY of the National Society for Crippled Children and Adults (2023 W. Ogden Ave., Chicago 12, Ill.) has made available free of charge two recent mimeographed compilations: *Sources of Information on Self-Help Devices for the Handicapped* (March, 1960) and *Selected References on Religion and the Handicapped* (April, 1960). The former is a two-page checklist and the latter a six.

Mrs. Vera Flandorf, Librarian at Children's Memorial Hospital, Chicago, has completed a second supplement to her bibliography of *Books to Help Children Adjust to a Hospital Situation*. The new supplement, dated March, 1960, annotates 96 new books suitable for children in the preschool years through the teen ages. The main list and its 2 supplements serve as an index to 285 recommended titles. The books are indexed according to age groups and to such childhood problems as: adjustment; cooperation; fear; hospital, doctors, and nurses; loneliness and nostalgia; and making new friends. The complete bibliography is available on request from the library of the National Society.

Bulova School of Watchmaking Surveys Earnings of Graduates

A SURVEY of the graduates of the Joseph Bulova School of Watchmaking (40-24 62nd St., Woodside 77, N.Y.) under the sponsorship of the New York State Division of Vocational Rehabilitation was done to compare their earnings with able-bodied persons doing the same work. The period surveyed was from March, 1951, through March, 1960; the 259 graduates sponsored by other states and other organizations were not included. Out of 55 graduates contacted, 44 replied. Three others were omitted from the survey, since they had been ill or did not give complete information.

The total of 44 graduates (varying disabilities represented) averaged \$85.16 in weekly earnings. Nine were graduates in the precision technician course and received the lowest average, \$67.60 per week. The 35 watch graduates averaged \$89.67 per week—26 graduated in watchmaking and averaged \$88.76, while 9 in precision averaged \$92.22. The U.S. Department of Labor Bulletin *Employment and Earnings* of February, 1960, reports an average weekly earning for production workers on clocks and watches to be \$76.81 as of December, 1959. Thus the 26 Bulova graduates in watchmaking surveyed average close to \$12.00 (15.8%) per week more than the national average.

Employment and Earnings reports the average 1959 weekly earnings for workers in mechanical, measuring, and controlling instruments as \$92.84. The Bulova figure for the 9 precision technicians' earnings

corrected to include the 9 watchmaking graduates employed in industrial precision work averaging \$92.22 brings the weekly figure of \$67.60 up to \$79.91. This figure seems still very low compared to the national average but might be explained by the comparatively short time the 9 graduates of the precision technician course have been employed—10 months. Combined with the 9 watch graduates in precision, who were employed an average of 45 months, an average length of employment of 27.5 months is arrived at. Very possibly the national average time is at least two to four years more than the Bulova average. As the difference in figures is not quite \$13.00 a week, modest salary increases would be expected to bring the two figures into accord.

Uses of Hypnosis Reported

PAPERS presented at the 11th Annual Meeting of the American Society of Psychosomatic Dentistry and Medicine held recently in Washington, D.C., reported that hypnosis is becoming more widely used in fields such as ophthalmology, plastic surgery, allergy, orthopedics, and proctology and in treatment of obesity. Dr. Donald D. Hassett, Rochester, N.Y., stated, "Where physical disability or illness makes a different type of anesthesia undesirable, results with hypnosis have been most gratifying." Dr. Henry E. C. Everett, Roswell Park Memorial Hospital, Buffalo, N.Y., reported hypnosis to be an aid in the patient's emotional adjustment to colostomy and in teaching post-surgical muscular control. After operations for fractures, fearful patients have been assisted by hypnosis to take their first weight-bearing steps, according to Dr. Alfred V. Cherry, Buffalo, N.Y. He stated that under hypnosis orthopedic patients have shown greater range of motion of extremities than while waking and that hypnosis has value as a muscle-relaxant in these patients. Dr. Herbert A. Ecker, Williamsport, Pa., discussed using hypnosis in plastic surgery when the patient must not move for long periods. Hypnosis can make the operation seem shorter. By achieving greater muscular relaxation, hypnosis allows bandages to be used in place of splints in many plastic surgery procedures.

Vocational Rehabilitation And Education Service of VA Initiates Quarterly

THE PURPOSE of the new *VR&E Quarterly Information Bulletin*, expressed in the initial issue, January, 1960, is to serve as a medium for exchange of information about productive practices of the Vocational Rehabilitation and Education Service. T. O. Kraabel is director of the Service, a part of Veterans Benefits, Veterans Administration, Washington 25, D.C. Distribution is within the Service.

Vol. 1, No. 1, of Journal of Health and Human Behavior Issued

THE SPRING, 1960, issue of the *Journal of Health and Human Behavior*, the first number to be published, is devoted to a two-part symposium on "Social Knowledge in Medicine." Part I includes the paper "Illness and the Psychodynamics of Stressful Life Situations as Seen in a Children's Clinic," by Abraham J. Simon, Ph.D., of the Chicago Medical School, and the paper by Victor D. Sanua, Ph.D., on "Sociocultural Factors in Responses to Stressful Life Situations: Aged Amputees As an Example," (see #401, this issue of *Rehab. Lit.*). Part II consists of the symposium on "Teaching the Social Sciences in Medical Schools," presented at the 1959 meeting of the Society for Applied Anthropology held in Madison, Wis.

Editor of the new journal is Austin L. Porterfield, Ph.D., Texas Christian University, Fort Worth 29, Texas. The subscription rate is \$6.00 a year (\$4.00 to individual social scientists at work in medicine). Subscriptions to foreign countries are an additional \$1.00 each. The quarterly journal is sponsored by the Leo Potishman Foundation at Texas Christian University.

Alabama and Rochester Universities Plan New Rehabilitation Centers

A GIFT of \$500,000 will enable the University of Alabama to construct a \$1.5-million rehabilitation center, through the use of federal matching funds on a two-for-one basis. Present plans call for the center to be built adjacent to the psychiatric clinic being constructed. It will be operated as an integral part of the University's medical center.

Construction began in April for a Rehabilitation and Diagnostic Center at the University of Rochester (N.Y.) Medical Center. Total cost, including equipment and furnishings, is estimated at \$1,494,000. Grants from the Ford Foundation and the Commonwealth Fund, federal sources, and loans will meet construction costs. The Center is expected to be completed in June, 1961.

National Foundation Now Publishing Abstracts on Congenital Anomalies

IN JANUARY, the Department of Professional Education of The National Foundation began publishing *Current Literature: Congenital Anomalies*, a monthly bibliographical record of articles published in the United States and abroad. References center around genetics, chemistry, cytology, embryology, and teratology and are compiled by Charlotte Thorndike North. The new publication supersedes *Poliomyelitis Current Literature*, which was published from 1947 through 1959.

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